

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.





*Gro. J. Ball*  
INC.  
WEST CHICAGO  
ILLINOIS

LIBRARY  
RECEIVED  
U.S. Department of Agriculture



# BALL

MUMS  
CARNATIONS  
BULBS FOR  
1946

Picturing the New White Pompon  
"PINOCCHIO"



# INSTRUCTIONS FOR ORDERING

Each year we try to improve the high quality of our disease-free Mum cuttings, as well as the service we give the florist.

This catalog contains valuable cultural directions for the growing of Mums, both inside the greenhouse and outside under shade cloth.

We have arranged to furnish more cuttings, better grown, better packed, and delivered to you at just the time you desire to plant them.

## TERMS OF SALE

1. The minimum total order that can be accepted is 250 cuttings.
2. Fifty of each variety is the minimum that can be supplied.
3. More than 50 of a variety must be in multiples of 50.
4. Quantity discounts will be allowed on each order for more than 10,000 cuttings as follows:  

10,000 to 24,950.....	2 1/2 %
25,000 to 49,950.....	5 %
50,000 to 99,950.....	7 1/2 %
100,000 to 249,950.....	10 %
250,000 up .....	12 1/2 %

Orders must be marked with a definite delivery date, such as February—Late March—May 10th—etc. Orders marked "Early Delivery"—"Deliver when ready"—"Spring Delivery" are too indefinite. Give us the approximate time when you can use these cuttings, and we will ship them at this date if you order early.

Orders cannot be changed or cancelled less than thirty days before shipping time.

## SUBSTITUTIONS

We will substitute varieties as good or better for any items not listed in this catalog unless order is marked NO SUBSTITUTIONS.

## SHIPPING INFORMATION

All our stock is shipped by Express COLLECT. All cuttings must be in perfect condition before being inspected and accepted by the Express Company. Therefore, if there is any damage enroute from being broken, heated, or frozen, call your express agent to inspect the same, marking on express receipt the condition of the package and amount of damage, etc. You must file claim, as our responsibility ceases when Express Co. accepts shipment. We cannot be responsible for the safe arrival of your cuttings.

## INDEX

1946 Novelties .....	4-7	Flowering Schedule .....	19-32
Recent Novelties .....	8-10	Cultural Notes .....	33-37
Price List All Varieties .....	11-16	Bulbs .....	37-41
Pot Plant Varieties .....	17-18	Carnations .....	42-43

## VARIETIES

	Page		Page		Page
<b>A</b>		Br. Bulkeley .....	15	Christmas Gold .....	13
Adelaide .....	15	Br. Daisy .....	15	Chrome Emerald .....	15
Alameda .....	12, 17	Br. Freida .....	15	Cincinnati .....	13, 18
Albatross .....	11	Br. Frick .....	12, 17	Citronella .....	11
Allegro .....	10, 13	Br. Goldsmith .....	9, 15	Citrus Queen .....	13
Ambassador .....	11, 17	Br. Masterpiece .....	15	Clara Holford .....	15
Anaconda .....	9, 12	Br. Mistletoe .....	12	Clara Jameson .....	15
Apricon .....	15	Br. Orchid Queen .....	12	Cocquette .....	13
Apricot Queen .....	12, 17	Br. Supreme .....	16, 18	Cordova .....	14
Apricot Valencia .....	8, 15	Burgundy .....	14	Crimson Carnelia .....	8, 15
Arcadia .....	14	<b>C</b>		Crimson Glow .....	15, 18
Argo .....	8, 15	Caliph .....	15	Crystal Jewell .....	14
Aristocrat .....	12	Cambria .....	12	<b>D</b>	
Avalanche .....	14	Cameo .....	14	Dk. Pk. Bulkeley .....	16
Aviator .....	10, 15	Capt. Cook .....	16	Dk. Pk. Freida .....	16
<b>B</b>		Cardonia .....	11, 17	Dk. Pk. Jewell .....	16, 18
Barbara Cumming .....	13	Carillon .....	16	Dk. Pk. Norma .....	16
Barcarole .....	8, 13	Carnelia .....	15, 18	Dk. Pk. Supreme .....	16
Beautiful Lady .....	16, 18	Cassandra .....	9, 15	Dk. Pk. Valencia .....	16
Betsy Ross .....	11	Catherine .....	15	Dec. Glory—Large .....	12
Bittersweet .....	8, 15	Cavalcade .....	16	Dec. Glory—Pom. ....	14
Blanche .....	14	Celestra .....	11, 17	Dec. Gold .....	14
Blazing Gold .....	11, 17	Chattanooga .....	12	Dec. White .....	12
Bonnaffon Deluxe .....	11, 17	Chicago Pearl .....	14	Derigold .....	13
Br. Buckingham .....	15, 18	Christina .....	11, 17	Detroit News .....	12
		Christmas Cheer .....	14	Dorothy Turner .....	15



# INDEX (Continued)

	Page		Page		Page
<b>E</b>					
Early Bronze	14, 18	Mahogany Viking	8, 15	Rosy Morn	12
Early October	12, 17	Major Bowes	12, 17	Royal Crimson	15
Early Wonder	16	Mandarin	15	Royal Queen	14
Early Yellow	13, 18	Margaret Moeller	5, 12	Ruby Pompon	14
Ed. Seidewitz	12	Marie DePetris	11	Rusticon	7, 15
Eliz. Peterson	15	Marketeer	11, 17	Ruth Cumming	15
Enchantress	16	Mary L. Hall	13	<b>S</b>	
Ethrelda	16, 18	Mason's Bronze	15	Saratoga	11
Europa	15	Mason's Red	15	Sarong	16
<b>F</b>		Masterpiece	16	Seafoam	14
Fez	15	Matchless	6, 14	Sea Gull	14
Fire Bird	15	Mefo	12	Shasta	14
Freida	16, 18	Melba	15, 18	Silver Ball	14
Friendly Rival	11, 17	Meteore	11	Silver Moon	14
<b>G</b>		Minong	14	Silver Sheen	11
Garnet King	12, 17	Minuet	8, 16	Silver Star	14
Garza Supreme	14	Mohawk Chief	12	Sm. Early White	11
Gladys Pearson	12	Monument	11	Sm. Late White	12, 17
Glitters	12, 17	Morning Glow	10, 16	Snow	14
Glow	15	Morning Star	10, 13	Snow White	11
Gold Coin	13	Mrs. Bulkeley	16	Spun Gold	14
Gold Imperial	15	Mrs. DuPont	16	Sunglow	11, 17
Gold Lode	11, 17	Mrs. Hooker	15	Sun Gold	11, 17
Golden Emblem	6, 13	Mrs. Kidder	11, 17	Sunnyside	10, 13
Golden Glory	11, 17	Mrs. Roy	12	Sunray	13, 18
Golden Herald	13, 18	Mrs. Stahelin	12, 17	Susanne Miller	13
Golden Jane	8, 13	<b>N</b>		Sylvanna	10, 15
Golden Mistletoe	11	Nancy Crain	14	Symphony	16
Golden Modena	13	Natoma	15	<b>T</b>	
Golden Mrs. Ross	11	Navaho	9, 15	Thanks. Pink	12, 17
Golden October	11	Nevada	10, 14	The Titan	15
Golden Pearson	11	New York	15	Thorina	15, 18
Golden Spray	13	Norma	16	Thyra	16, 18
Golden Surprise	13	Normandie	14	Trianon	9, 15
Goldsmith	13	Nuggets	13, 18	<b>U</b>	
Good News	11	<b>O</b>		Usona	16
Graceland	14, 18	Oak Leaf	12	Uvalda	14
Granite State	4, 11, 17	Oct. Bronze	15	<b>V</b>	
Gypsy	15, 18	Oct. Pink	16	Valencia	16
<b>H</b>		Oct. Rose	12	Vesper	9, 14
Harvard	12, 17	Orchid Beauty	16, 18	Vibrant	14
Harvester	4, 11	Orchid Queen	12	Viking	15
Has. Gold	13	<b>P</b>		<b>W</b>	
Has. Pink	16	Pearl	14	Wh. Anemone	14
Helen Frick	12, 17	Penrod	11, 17	W. H. Buckingham	16, 18
Helios	13	Peter John	12, 17	Wh. Doty	14
Hilda Bergen	12	Pink Chief	12	Wh. Freida	14
Honeydew	11, 17	Pink Dot	16	Wh. Frick	12, 17
<b>I</b>		Pink Mistletoe	12	Wh. Jewell	14, 18
Imp. Dec. Beauty	12	Pink Pearl	16	Wh. Mensa	14
Imp. Tobin's Yel.	11	Pk. Treasure Is.	16	Wh. Mistletoe	12
Imp. Yel. Chatt.	11	Pink Turner	12	Wh. Norma	14, 18
Ind. Bronze	12, 17	Pinocchio	5, 14	Wh. Supreme	14
Ind. Pink	12, 17	Pixie	9, 13	Wh. Yuletide	14, 18
Ind. White	11, 17	Pomponette	13	Whittier	11
Indianola	12	Princeton	13, 18	Wildfire	15
Indian Summer	15	Priscilla	14	Wm. Turner	11
Irene	14, 18	Prosperity	16	Winterset	14
Ivanhoe	7, 12	<b>Q</b>		Wolverine	13
Ivory Snow	10, 14	Quaker Maid	11, 17	<b>Y</b>	
<b>J</b>		Queen of Pinks	16, 18	Yel. Ambassador	11
Jane	15	<b>R</b>		Yel. Arcadia	13
Jean Cumming	14	Red Daisy	15	Yel. Beauty	13, 18
Jean Treadway	16	Red Melba	15, 18	Yel. Bushnell	13
Jemima	15	Red Princeton	15	Yel. Cameo	6, 13
Jessie	16	Red Rolinda	15, 18	Yel. Cordova	13
Jewell	16	Red Valencia	15	Yel. Daisy	13
Judith Anderson	13, 18	Red Velvet	15	Yel. Dot	13
Justrite	12, 17	Reliance	11	Yel. Doty	13
J. W. Prince	12, 17	Revelation	10, 14	Yel. Fellow	13, 18
<b>K</b>		Rev. Bushnell	14	Yel. Garza	14
King Midas	13	Richard Mandel	14, 18	Yel. Hammer	13
<b>L</b>		Riviera	9, 16	Yel. Irene	13
Lavender Lady	16	Robin Hood	15	Yel. Mefo	11
Legal Tender	15	Rodell Imp.	13, 18	Yel. Monument	11
Lillian Doty	16	Roman Bronze	15	Yel. New York	13
Linda Lou	16	Rosabella	12, 17	Yel. Rolinda	13, 18
Little America	14, 18	Rosalind	16	Yel. Sea Gull	13
Lodestar	13	Rose Charm	16	Yel. Snow	14
L. I. Beauty	14	Rose Chochard	12, 17	Yel. Supreme	14
		Rose Glow	16	Yel. Turner	11
				Yolanda	15
				Yukon	14

# *New Mums for 1946*

We present four new standards and five new pompons for the coming season. We believe each one to be a valuable addition to our list. They have been carefully grown and tested for several years, and each variety looks like a leader in its class. If you are looking for an improvement in these types of Mums, we believe the following will interest you.

**When ordering, carefully follow instructions on inside cover page.**

## **GRANITE STATE** **(Geo. J. Ball, Inc.)**

A medium size, clear white mum ideally suited for pot plant culture. The flower is of good substance, semi-incurved form and matures normally October 25. The growth habit is similar to Richard Mandel, being dwarf and compact. Granite State responds well to early shade, producing a quality flower much superior to Christina. A fine contribution to pot plant culture from the University of New Hampshire and distributed by us. **(See cut on back cover.)**

Price for rooted Cuttings **\$100.00** per 1000



## ← **HARVESTER** **(Yoder Bros.)**

An intense canary yellow standard that blooms for Thanksgiving. The flower is of medium size, hard and durable. Its bright, lustrous color; its wax-like petals and its very attractive semi-incurved form give this variety an appearance of substance and freshness that commands immediate attention. The foliage is attractive and healthy and is carried right up to the base of the flower. The stems are medium in size, strong and rigid. Harvester is a good shipper and is well liked by the retail trade. We recommend this variety to all growers as an easily grown bright yellow standard for the Thanksgiving season.

Price for rooted Cuttings **\$100.00** per 1000



## 1946 Novelties



### MARGARET MOELLER

(above)

(Yoder Bros.)

A clear white standard that matures December 10, following December Glory and just preceding Smith's Late White. It is a very formal, tightly incurved flower and possesses excellent substance.

The growth habit is clean and vigorous with beautiful foliage carried well up to the flower. The medium-sized stems are extremely rigid. Its shipping and keeping qualities are unequalled by any standard in its season.

This variety responds well in either raised benches or ground beds. However, it is especially suited to ground bed culture, and attains its largest size and greatest commercial value when handled in this manner.

By the application of electric lights, this variety can easily be delayed for Christmas and later flowering.

Price for rooted Cuttings **\$100.00** per 1000

### PINOCCHIO

(Yoder Bros.)

A glistening white button for early cloth house shading. It responds beautifully to black cloth treatment and for this reason we believe it will fill the insistent demand for a small white pompon that can be easily shaded into late August and early September maturity.

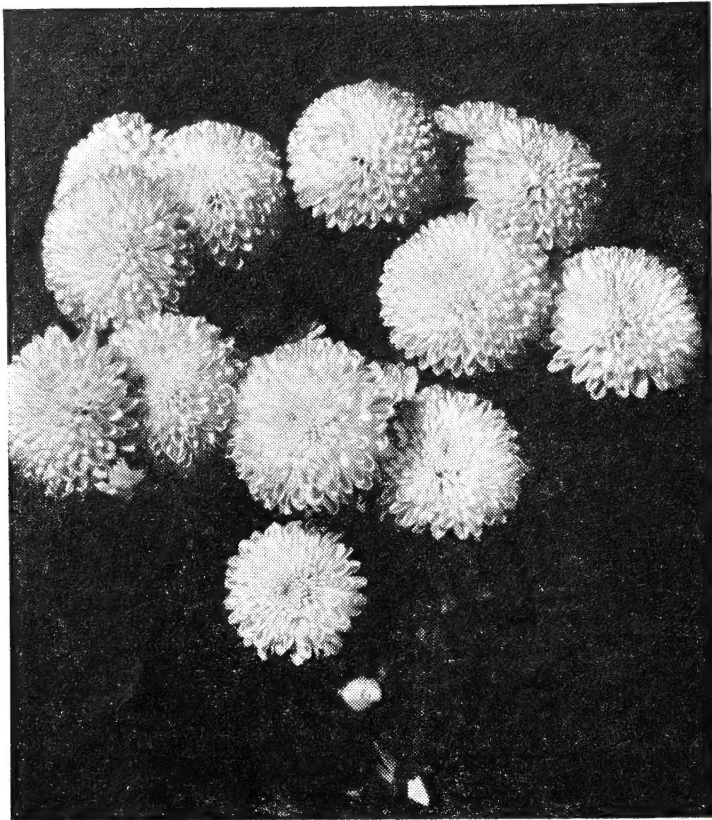
The flower is a beautifully formed tightly quilled button of lively and dainty appearance. It is of hard substance and has good keeping and shipping qualities. The color is a clear sparkling white.

The growth is vigorous, taller than Irene and requires less time between pinching and shading to form a fuller spray of flowers.

Bunches of Pinocchio appear smarter than Irene because the spray formation is more nearly single planed; and fresher because of the more uniform opening of its flowers. (See cut on front cover.)

Price for rooted Cuttings **\$100.00** per 1000

# 1946 Novelties



← **GOLDEN EMBLEM**  
(De Petris)

Medium sized clear yellow pompon that blooms normally the end of November. The flowers are produced on well spaced sprays and are of close compact form with very good substance.

Golden Emblem is easy to grow and responds well to shading.

It combines good quality with good production and disease resistance.

Good results are obtained either in ground or raised benches. It will not produce blind growth so common in late varieties.

Maturing the latter part of November, Golden Emblem will be found to be a welcome addition to yellow pompons in that season where quality and easy growth is combined with good production.

Price for rooted Cuttings **\$100.00** per 1000

**MATCHLESS**  
(De Petris)

Judged by present day standards this variety by all odds seems to be the best white pompon introduced to date.

Matchless possesses large solid blooms of great substance. These are well placed on strong sprays. Stems are of ample length and are clean, straight and rigid. Its growth is very free and robust with beautiful light green luxuriant foliage.

The variety breaks freely from pinches and produces well under nearly all conditions, the production being very good either in ground or raised benches.

Normal blooming date November 20th to 22nd, making it ideal for Thanksgiving.

Matchless shades well and for this purpose should be an excellent variety to follow Bushnell and similar varieties.

We can recommend Matchless as a productive and an easily grown variety that responds well to nearly all types of cultural conditions besides being a pompon of very high quality.

Awarded Chrysanthemum Society of America's gold medal at the National Chrysanthemum Show in 1943.

Price for rooted Cuttings **\$100.00** per 1000



**YELLOW CAMEO**  
(Yoder Bros.)

A deep lemon yellow sport from Cameo. The form and growth habit are identical with the parent variety. Because of the popularity of Cameo, this attractive yellow counterpart should be a very valuable variety for early December flowering.

Price for rooted Cuttings **\$100.00** per 1000



## 1946 Novelties



### ← RUSTICON

(Yoder Bros.)

An intense rust red pompon for Thanksgiving. The flower is of a very attractive, decorative form having excellent substance and a very full petallage.

The growth is vigorous and persistent. It is of extremely easy culture, its dark rigid sprays and high production combine to give it a definite place in the highly competitive Thanksgiving season.

It possesses more vigor than Red Rolinda, a quality of flower far superior to Legal Tender and just precedes Bronze Goldsmith in flowering.

The very appealing color of Rusticon is a rich blend of crimson and rust bronze which commands immediate attention at Thanksgiving.

Price for rooted Cuttings **\$100.00** per 1000

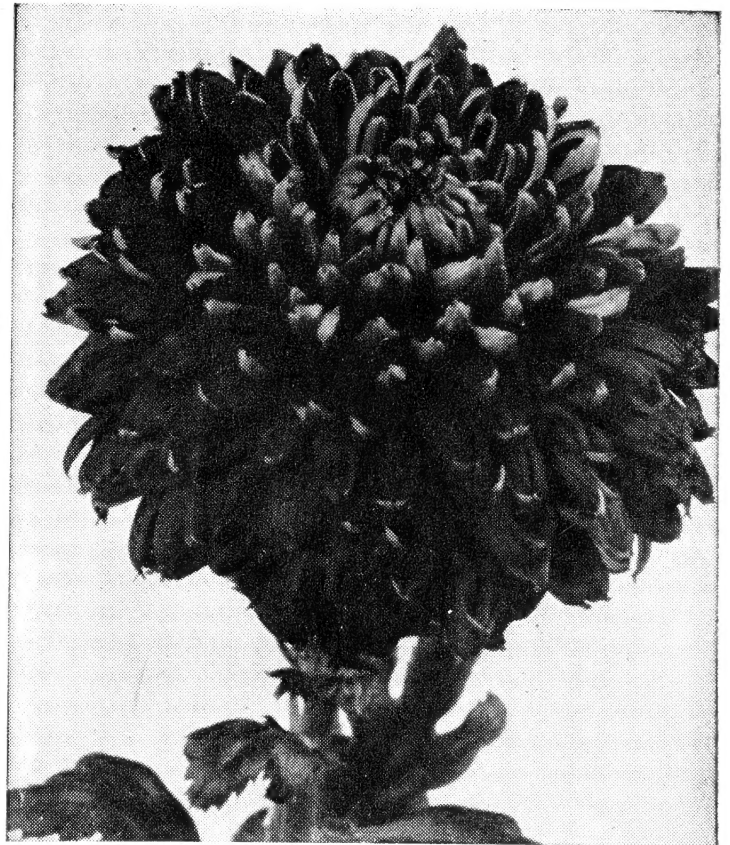
### IVANHOE →

(Yoder Bros.)

A small reddish bronze mum for disbudding, equally suitable as a cut flower or pot plant, maturing November 1. The flower is decorative in form, similar but more formal than Glitters. Its hard substance gives it unusual shipping quality. Foliage is small and is carried right up to the bloom. Stems are rigid and must be disbudded to a single flower. Like the Mandel varieties, it is vigorous and persistent, dependably producing a uniform crop. Because of its free breaking habit, it will stand fairly close cropping and still produce uniform stems. This same quality results in well shaped plants when grown in pots.

Ivanhoe holds its color well under early shade when good bronze disbuds command a premium market.

Price for rooted Cuttings **\$100.00** per 1000



## Recent Novelties



### **MAHOGANY VIKING**

(Yoder Bros.)

This novel and beautifully colored sport from Viking has a more vigorous growth habit than its parent.

The color is intensified to a rich mahogany bronze. The flower is larger and bunches to greater advantage than the parent variety. Growers should find this variety more profitable than the original Viking.

Price for rooted Cuttings **\$80.00** per 1000

### **BITTERSWEET**

(Yoder Bros.)

A beautiful medium-sized bittersweet red daisy that blooms normally November 8. The flower possesses good substance and keeping qualities. It retains its brilliance with full maturity. The flower has from 3 to 4 rows of stiff, broad petals that lay perfectly flat, giving a fresh, lively and attractive appearance. Bittersweet has a stiff wiry stem and produces well-branched sprays. The foliage is small, dark-green and glossy. It bunches well and because of its striking color and attractive foliage, it commands attention when displayed with other varieties. Bittersweet creates its own market demand.

Price for rooted Cuttings **\$100.00** per 1000

### **CRIMSON CARNELIA**

(Yoder Bros.)

A distinct color variation from the original variety, Carnelia. The color of this sport is an intense crimson which holds well. It possesses all the good qualities and characteristics of the parent variety.

Price for rooted Cuttings **\$80.00** per 1000



### **BARCAROLE**

(Yoder Bros.)

An intense golden yellow pompon that blooms normally November 5. The habit of growth is outstandingly vigorous. It is of extremely easy culture and its smart, dark, glossy foliage, its rigid sprays and high production mark it as a real bread and butter variety. It responds rapidly to shade, flowering with Nuggets when shaded with that variety. We suggest that those who now grow Mary Lennon Hall under black cloth will find Barcarole a more satisfactory variety.

Price for rooted Cuttings **\$100.00** per 1000

### **MINUET**

(Yoder Bros.)

A soft pink pompon similar in color to Mrs. Morgan Bulkeley and equal or better than that variety in flower quality and growth habit. Minuet provides a pink pompon for Thanksgiving that is so superior to existing late November pink pompons that it should become the leading variety for that season.

Price for rooted Cuttings **\$80.00** per 1000

### **ARGO**

(De Petris)

A medium-sized pompon with good decorative form and excellent substance for Thanksgiving and early December. The color is a beautiful bronzy orange, shading to a rust. In color and in growth habit, which is somewhat dwarf and rigid, it resembles the later variety Cavalcade. It makes its growth late in the season and therefore should not be planted late. Argo is a quality pompon with a very appealing color which sells on sight.

Price for rooted Cuttings **\$80.00** per 1000

### **APRICOT VALENCIA**

(Yoder Bros.)

A beautiful apricot or rosewood buff sport from Dark Pink Valencia. In growth and form it is identical with this variety, being less vegetative than the original Valencia. The color is distinctly new in this group. It is a favorite with retailers. To the grower of Valencia, we say without hesitation that Apricot Valencia is a valuable addition to this group.

Price for rooted Cuttings **\$50.00** per 1000

### **GOLDEN JANE**

(Yoder Bros.)

A beautiful golden intensification of the original buff-bronze Jane. Much brighter and more vivid in color and for this reason a more desirable variety. We predict this variety will replace Jane.

Price for rooted Cuttings **\$50.00** per 1000



## Recent Novelties (continued)

### TRIANON

(De Petris)

The outstanding merits of Trianon are its appealing crimson bronze color, the perfect form of its small round flowers, its hard substance and its attractive bunches and fine shipping qualities. Its season is that of the well-known variety New York. It is better than that variety in flower color and form. It is in a class with the variety Fez in respect to the quality of flower and superior to that variety in type of growth and the resistance of its foliage to the ravages of insects and disease. It responds normally to shade and holds its color well.

Price for rooted Cuttings **\$80.00** per 1000

### BRONZE GOLDSMITH

(Yoder Bros.)

A sport from the original variety Goldsmith, similar to and richer in color than well-grown Natoma or Red Princeton. Its color is always in keen demand. In growth and season, it is identical to the parent variety. Carefully grown, Bronze Goldsmith on disbudded sprays is, for bronze pompons, unsurpassed in quality and value for late September and October flowering in the cloth house.

Price for rooted Cuttings **\$80.00** per 1000

### ANACONDA

(De Petris)

A large-flowered incurved commercial possessing excellent substance. It matures November 10, just following Detroit News and preceding Mrs. D. F. Roy. The color is a deep coppery red with golden bronze reverse. A combination very similar to the variety Mrs. D. F. Roy. When shaded for early October, the color is a rich golden copper.

Price for rooted Cuttings **\$50.00** per 1000

### CASSANDRA

(De Petris)

A bright orange bronze pompon that is a distinct advance in color for its season of November 10. It has fully rounded form and good substance. Cassandra has proven an excellent variety for cloth house shade, producing an early crop with little fading. This variety has a habit of forming early crowns which can be overcome by a late pinch not exceeding 30 days prior to the application of shade, otherwise its cultural requirements are identical with Mrs. Bulkeley and Rev. Bushnell.

Price for rooted Cuttings **\$50.00** per 1000

### RIVIERA

(Yoder Bros.)

A luminous pink decorative pompon blooming normally about December 10, just nicely following Minuet. This variety finishes beautifully, maintaining its color and form much better than existing varieties that bloom at the same season. The flower is showy and of good substance. Its heavy petallage permits an extended season of cutting. The growth is vigorous, of medium height and high production. The spray resembles that of Snow, being extremely rigid and well branched. With the application of electric lights Riviera is easily delayed to the important Christmas season.

Price for rooted Cuttings **\$50.00** per 1000

### VESPER

(Yoder Bros.)

This variety combines the flower quality of Rev. Bushnell with the free growth and high production of Sea Gull. It is a pure white pompon of unusually good substance, blooming normally November 10. Its heavy petallage permits a long period of cutting. Under black cloth shade, it just follows Sea Gull. Of free growth and easy culture, Vesper raises the existing standard of dependable and profitable early white pompons.

Price for rooted Cuttings **\$50.00** per 1000

### NAVAHO

(Yoder Bros.)

A medium-sized deep crimson, decorative pompon which changes to a reddish bronze under early shading. It responds well to black cloth and fills a great need for a cloth house variety in its color range. It is at its best when growth is kept soft, plants are generously spaced, and its crop limited to 3 or 4 stems per plant. When so grown, it is undoubtedly the best red pompon for cloth house culture.

Price for rooted Cuttings **\$50.00** per 1000

### PIXIE

(Yoder Bros.)

A small, well-rounded pompon somewhat larger than Nuggets, with a color that is much brighter and more attractive. It is a remarkably good shipper. It responds beautifully to shading and is therefore an important yellow pompon for the cloth house during September and October. It blooms normally November 10. For the grower who wants small hard pompons of simple, easy culture, we recommend Pixie.

Price for rooted Cuttings **\$50.00** per 1000

## Recent Novelties (continued)



### **SYLVANNA**

(Yoder Bros.)

One of the few cloth house daisies that combine a high quality flower and a growth habit that can be depended upon to produce a heavy crop under a wide diversity of soils and cultural conditions. The color, a brilliant orange bronze, holds well with full maturity, allowing an extended period for marketing. When successively shaded, Sylvanna makes a fine cut flower from the middle of September until November 10, its natural maturing date.

Price for rooted Cuttings **\$80.00** per 1000

### **IVORY SNOW**

(Yoder Bros.)

A very soft ivory yellow sport of Snow that provides a color that is extremely useful to the floral designer.

The very favorable market response to Ivory Snow, together with the increasing popularity of the pale pastel shades of color, indicate clearly that growers of the variety Snow will find this new sport a valuable and profitable supplement.

Price for rooted Cuttings **\$80.00** per 1000

### **NEVADA**

(De Petris)

A desirable and useful anemone producing flowers of high quality for Thanksgiving. The color is pure white with chartreuse green center. This variety responds well to generous spacing and disbudded spray technique. For the grower who appreciates Europa, Valencia and its sports, Nevada provides a white of equal quality.

Price for rooted Cuttings **\$80.00** per 1000

### **REVELATION**

(Yoder Bros.)

Revelation fills the need for quality white pompons for the January market. It will thrive and produce abundantly under any condition or method of growing that will produce a satisfactory crop of Garza. It has never been known to go blind. Revelation makes possible the easy production of high quality white pompons for Christmas and early January, without loss of production or risk to the grower. With the careful application of a small amount of electric light, its flowering can be extended into early February.

Price for rooted Cuttings **\$50.00** per 1000

### **SUNNYSIDE**

(Yoder Bros.)

This variety fills the persistent demand from all wholesale growers for a round, hard flower which will ship and handle without bruising or other damages. It is a strong grower and will consistently produce a heavy crop of well-branched sprays that are easy to bunch. The quality of flower is equal to or better than any existing yellow pompon regardless of season. The color is a clear, brilliant yellow. Its season is Thanksgiving and later. It will hold well on the bench.

Price for rooted Cuttings **\$50.00** per 1000

## **New Hardy Varieties**

### **ALLEGRO**

(De Petris)

A charming and beautiful variety that will be welcomed by all connoisseurs. One of the finest shrimp-pink varieties for cutting, coming into full bloom October 15th. This variety may be disbudded to produce single blossoms.

Price for rooted Cuttings **\$100.00** per 1000

### **AVIATOR**

(De Petris)

We predict that this new rich coppery red will be the most popular garden Chrysanthemum of its color. A vigorous and easy grower, coming into full bloom October 10.

Price for rooted Cuttings **\$100.00** per 1000

### **MORNING STAR**

(De Petris)

A large fully double soft primrose-yellow shading to cream-yellow. Extremely early flowering, blooming from late August until killing frost. It is extremely hardy and the foliage is disease resistant.

Price for rooted Cuttings **\$100.00** per 1000

### **MORNING GLOW**

(De Petris)

A lovely early flowering lavender to mauve-pink without a trace of magenta. A most desirable color.

Price for rooted Cuttings **\$100.00** per 1000



# Large Flowering Commercial Varieties

S—Indicates varieties we find most suitable for shading.  
P—Indicates varieties suitable for Pot Plants.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO  
NO ORDERS FOR LESS THAN 50 CUTTINGS OF A VARIETY ACCEPTED  
YOUR TOTAL ORDER MUST BE FOR NOT LESS THAN 250 CUTTINGS

## YELLOW

Name and Description		Size & Type	Matures	Price per 1000	
				Unrooted	Rooted
P	Gold Lode. Light golden yellow.....	Int. Reflexed	Oct. 1	\$27.50	\$37.50
	Golden October. Deep lemon yellow.....	Int. Semi-Inc.	Oct. 10	27.50	37.50
P	Celestra. Lemon yellow .....	S. Incurved	Oct. 15	27.50	37.50
SP	Mrs. H. E. Kidder. Deep lemon yellow.....	L. Incurved	Oct. 20	27.50	37.50
	Yellow Ambassador. Light lemon yellow.....	L. Incurved	Oct. 23	27.50	37.50
SP	Blazing Gold. Deep golden yellow.....	Int. Incurved	Oct. 25	27.50	37.50
SP	Sunglow. Golden yellow.....	L. Incurved	Oct. 25	27.50	37.50
	Citronella. Light buff yellow .....	Int. Incurved	Oct. 28	27.50	37.50
S	Saratoga. Bright golden yellow.....	L. Semi-Inc.	Nov. 1	27.50	37.50
SP	Golden Glory. Golden yellow.....	Int. Semi-Inc.	Nov. 1	27.50	37.50
S	Good News. Deep lemon yellow.....	Int. Incurved	Nov. 1	27.50	37.50
	Yellow Turner. Light yellow.....	L. Incurved	Nov. 5	27.50	37.50
P	Cardonia. Deep golden yellow.....	Int. Incurved	Nov. 10	27.50	37.50
SP	Penrod. Golden yellow .....	Int. Incurved	Nov. 10	27.50	37.50
	Whittier. Lemon yellow .....	L. Incurved	Nov. 13	27.50	37.50
	Yellow Monument. Light lemon yellow.....	L. Incurved	Nov. 15	27.50	37.50
P	Honey Dew. Lemon yellow.....	Int. Incurved	Nov. 15	27.50	37.50
	Reliance. Light lemon yellow.....		Nov. 20	70.00	80.00
S	Yellow Mefo. Lemon yellow.....	L. Incurved	Nov. 20	27.50	37.50
SP	Bonnaffon Deluxe. Golden yellow.....	S. Incurved	Nov. 20	27.50	37.50
P	Friendly Rival. Deep chrome yellow.....	L. Incurved	Nov. 20	27.50	37.50
	Marie Depetris. Deep golden yellow.....	L. Incurved	Nov. 23	27.50	37.50
P	Sun Gold. Lemon yellow.....	Int. Semi-Inc.	Nov. 25	27.50	37.50
	Harvester. Deep canary yellow.....		Nov. 25	90.00	100.00
S	Golden Pearson. Light golden yellow.....	Int. Incurved	Nov. 25	27.50	37.50
	Improved Yellow Chattanooga .....	L. Incurved	Nov. 25	27.50	37.50
	Golden Mrs. Ross. Golden yellow.....	L. Incurved	Dec. 3	27.50	37.50
	Golden Mistletoe. Light golden yellow.....	L. Incurved	Dec. 10	27.50	37.50
	Meteore. Lemon yellow .....	Int. Semi-Inc.	Dec. 10	70.00	80.00
	Improved Tobin's Late Yellow.....	Int. Semi-Inc.	Dec. 15	27.50	37.50

## WHITE

	Smith's Early White .....	Int. Semi-Inc.	Oct. 5	27.50	37.50
P	Quaker Maid. White, tinged pink.....	Int. Reflexed	Oct. 15	27.50	37.50
S	Silver Sheen .....	Int. Incurved	Oct. 18	27.50	37.50
SP	Christina .....	S. Incurved	Oct. 20	27.50	37.50
P	Ambassador. Cream white .....	L. Incurved	Oct. 23	27.50	37.50
P	Granite State. (See back cover) .....		Oct. 25	90.00	100.00
S	Albatross .....	L. Incurved	Nov. 1	27.50	37.50
S	Snow White .....	Int. Incurved	Nov. 1	27.50	37.50
S	Betsy Ross. Ivory white .....	L. Incurved	Nov. 1	27.50	37.50
	William Turner. White .....	L. Incurved	Nov. 5	27.50	37.50
SP	Indianapolis White .....	Int. Incurved	Nov. 8	27.50	37.50
	Monument. Ivory white .....	L. Incurved	Nov. 15	27.50	37.50
SP	Marketeer .....	Int. Semi-Inc.	Nov. 18	27.50	37.50

Large Flowering Commercial Varieties (continued)

WHITE (Continued)

S	Mefo.	Ivory white .....	L. Incurved	Nov. 20	27.50	37.50
P	White Frick.	White suffused pink.....	Int. Incurved	Nov. 25	27.50	37.50
	Chattanooga	.....	L. Incurved	Nov. 25	27.50	37.50
	December White	.....	Int. Incurved	Dec. 5	70.00	80.00
	Improved December Beauty	.....	L. Incurved	Dec. 8	27.50	37.50
	Margaret Moeller.	White .....		Dec. 10	90.00	100.00
	White Mistletoe	.....	Int. Incurved	Dec. 10	27.50	37.50
P	Smith's Late White.	Ivory white.....	Int. Semi-Inc.	Dec. 15	27.50	37.50
	December Glory.	Ivory white.....	Int. Incurved	Dec. 15	27.50	37.50

BRONZE AND RED

S	Indianola.	Light reddish bronze .....	Int. Semi-Inc.	Oct. 10	27.50	37.50
S	Hilda Bergen.	Dark reddish bronze.....	S. Incurved	Oct. 25	27.50	37.50
S	Cambria.	Golden bronze .....	Int. Incurved	Oct. 25	27.50	37.50
P	Alameda.	Reddish bronze .....	Int. Incurved	Oct. 25	27.50	37.50
SP	Glitters.	Deep reddish orange.....	Int. Reflexed	Oct. 28	27.50	37.50
	Ivanhoe.	Reddish bronze.....		Nov. 1	90.00	100.00
SP	Apricot Queen.	Orange bronze.....	Int. Incurved	Nov. 1	27.50	37.50
S	Detroit News.	Reddish bronze.....	Int. Incurved	Nov. 1	27.50	37.50
SP	Indianapolis Bronze.	Buff bronze.....	Int. Incurved	Nov. 8	27.50	37.50
	Bronze Orchid Queen.	Apricot buff.....	L. Incurved	Nov. 10	27.50	37.50
S	Anaconda.	Deep coppery red.....	Int. Incurved	Nov. 15	40.00	50.00
S	Mrs. David F. Roy.	Crimson.....	Int. Incurved	Nov. 15	27.50	37.50
P	Mrs. A. J. Stahelin.	Reddish bronze.....	Int. Incurved	Nov. 15	27.50	37.50
P	Garnet King.	Dark red.....	Int. Reflexed	Nov. 18	27.50	37.50
	Gladys Pearson.	Light buff bronze.....	Int. Incurved	Nov. 25	27.50	37.50
	Oak Leaf.	Reddish bronze.....	Int. Incurved	Nov. 25	27.50	37.50
P	Bronze Frick.	Light bronze.....	Int. Incurved	Nov. 25	27.50	37.50
P	Harvard.	Deep red .....	Int. Reflexed	Nov. 30	27.50	37.50
	Mohawk Chief.	Deep red.....	Int. Reflexed	Nov. 30	27.50	37.50
	Bronze Mistletoe.	Buff bronze.....	Int. Incurved	Dec. 10	27.50	37.50

PINK

P	Early October.	Light lavender.....	S. Semi-Inc.	Oct. 10	70.00	80.00
S	Pink Chief.	Lavender .....	Int. Incurved	Oct. 15	27.50	37.50
SP	Justrite.	Light rose pink.....	S. Incurved	Oct. 15	27.50	37.50
P	Major Ed. Bowes.	Deep lavender.....	Int. Incurved	Oct. 20	27.50	37.50
	October Rose.	Light lavender.....	Int. Incurved	Oct. 20	27.50	37.50
P	Rose Chochard.	Light lavender.....	S. Incurved	Oct. 20	27.50	37.50
P	Rosabella.	Rose pink .....	S. Incurved	Oct. 25	27.50	37.50
	Rosy Morn.	Deep rich pink.....	Int. Incurved	Oct. 25	70.00	80.00
	Pink Turner.	Lavender .....	L. Incurved	Nov. 5	27.50	37.50
SP	J. W. Prince.	Rose pink.....	Int. Incurved	Nov. 5	27.50	37.50
SP	Indianapolis Pink.	Deep lavender.....	Int. Incurved	Nov. 8	27.50	37.50
S	Orchid Queen.	Orchid pink.....	L. Incurved	Nov. 10	27.50	37.50
	Aristocrat.	Deep orchid pink.....		Nov. 20	70.00	80.00
P	Thanksgiving Pink.	Amaranth.....	Int. Reflexed	Nov. 23	27.50	37.50
P	Peter John.	Deep rose pink.....	Int. Reflexed	Nov. 23	27.50	37.50
P	Helen Frick.	Rose pink.....	Int. Incurved	Nov. 25	27.50	37.50
	Edwin Seidewitz.	Lavender .....	Int. Incurved	Nov. 30	27.50	37.50
	Pink Mistletoe.	Lavender .....	Int. Incurved	Dec. 10	27.50	37.50

# Pompons, Single and Anemone Varieties

Types are abbreviated as follows: Pom.—Pompon; Dec.—Decorative; Sgl.—Single; Anem.—Anemone.

Size of flower is indicated by S.—Small; Int.—Intermediate; L.—Large.

S—Indicates varieties we find most suitable for shading.

P—Indicates varieties suitable for Pot Plants.

D—Indicates varieties most suitable for growing as disbudded pompons.

H—Hardy or garden types.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO  
NO ORDERS FOR LESS THAN 50 CUTTINGS OF A VARIETY ACCEPTED  
YOUR TOTAL ORDER MUST BE FOR NOT LESS THAN 250 CUTTINGS

## YELLOW

H	Barbara Cumming.	Buff yellow.....	Med., Int. Dec.	Sept. 15	\$27.50	\$37.50
PH	Early Yellow.	Light golden yellow.....	Short, S. Pom.	Sept. 15	27.50	37.50
H	Morning Star.	Primrose yellow.....		Sept. 20	90.00	100.00
H	Pomponette.	Light buff yellow.....	Med., Int. Pom.	Sept. 20	27.50	37.50
H	Wolverine.	Light yellow .....	Med., Int. Dec.	Sept. 25	27.50	37.50
H	King Midas.	Light lemon yellow.....	Med., Int. Dec.	Sept. 30	27.50	37.50
PH	Judith Anderson.	Golden yellow.....	Med., S. Pom.	Oct. 15	27.50	37.50
H	Allegro.	Shrimp pink .....		Oct. 15	90.00	100.00
SH	Yellow Irene.	Light lemon yellow.....	Short, S. Pom.	Oct. 18	27.50	37.50
SPH	Rodell Improved.	Light lemon yellow.....	Short, Int. Pom.	Oct. 20	27.50	37.50
S	Yellow Hammer.	Golden yellow.....	Med., Int. Pom.	Oct. 20	27.50	37.50
SPD	Cincinnati.	Golden yellow .....	L. Pom.	Oct. 20	27.50	37.50
S	Golden Spray.	Deep lemon yellow.....	Med., Int. Pom.	Oct. 23	27.50	37.50
SPD	Golden Herald.	Deep golden yellow.....	Med., L. Dec.	Oct. 25	27.50	37.50
S	Yellow Dot.	Yellow, bronze center.....	Med., Int. Pom.	Oct. 25	27.50	37.50
S	Yellow Arcadia.	Pernet yellow.....	Med., Int. Pom.	Oct. 28	27.50	37.50
S	Yellow Daisy.	Deep lemon yellow.....	Med., Int. Sgl.	Nov. 1	27.50	37.50
SD	Mary Lennon Hall.	Lemon yellow.....	Tall, Int. Pom.	Nov. 1	27.50	37.50
D	Yellow Sea Gull.	Light lemon yellow.....	Tall, Int. Pom.	Nov. 1	27.50	37.50
D	Yellow Doty.	Buff yellow .....	Med., L. Pom.	Nov. 1	27.50	37.50
	Barcarole.	Golden yellow .....	Int. Pom.	Nov. 5	90.00	100.00
SP	Nuggets.	Light lemon yellow.....	Short, S. Pom.	Nov. 5	27.50	37.50
S	Yellow Bushnell.	Pernet yellow.....	Tall, Int. Pom.	Nov. 8	27.50	37.50
	Pixie.	Deep golden yellow.....	Med., S. Pom.	Nov. 10	40.00	50.00
	Derigold.	Deep golden yellow.....	Med., Int. Pom.	Nov. 10	27.50	37.50
SPD	Yellow Beauty.	Golden yellow.....	L. Pom.	Nov. 10	27.50	37.50
SD	Helios.	Deep golden yellow.....	Med., L. Anem.	Nov. 10	27.50	37.50
S	Yellow New York.	Deep lemon yellow.....	Med., S. Pom.	Nov. 13	27.50	37.50
	Cocquette.	Clear golden yellow.....	S. Pom.	Nov. 15	70.00	80.00
SP	Princeton.	Orange yellow .....	Med., Int. Dec.	Nov. 15	27.50	37.50
SPD	Yellow Fellow.	Deep lemon yellow.....	Med., Int. Dec.	Nov. 15	27.50	37.50
P	Sunray.	Light lemon yellow.....	Med., Int. Anem.	Nov. 15	27.50	37.50
SD	Susane Miller.	Buff yellow.....	Tall, L. Anem.	Nov. 18	27.50	37.50
	Golden Surprise.	Sulphur yellow.....	Med., Int. Pom.	Nov. 18	40.00	50.00
	Golden Emblem.	Golden yellow.....	Int. Pom.	Nov. 20	90.00	100.00
	Hasegawa Gold.	Light golden yellow.....	Med., Int. Pom.	Nov. 23	27.50	37.50
PD	Yellow Rolinda.	Light buff yellow.....	Med., Int. Anem.	Nov. 23	27.50	37.50
	Sunnyside.	Golden yellow .....	Med., Int. Pom.	Nov. 25	40.00	50.00
	Lodestar.	Golden yellow .....	Med., Int. Sgl.	Nov. 25	70.00	80.00
D	Goldsmith.	Golden yellow .....	Med., Int. Dec.	Nov. 25	27.50	37.50
D	Citrus Queen.	Lemon orange.....	Med., L. Anem.	Nov. 25	27.50	37.50
	Christmas Gold.	Deep golden yellow.....	Med., S. Pom.	Nov. 28	27.50	37.50
D	Golden Jane.	Brilliant golden yellow .....	Med., L. Sgl.	Nov. 28	40.00	50.00
	Yellow Cordova.	Lemon yellow.....	Med., Int. Dec.	Nov. 30	27.50	37.50
D	Gold Coin.	Deep lemon yellow.....	Med., Int. Pom.	Dec. 1	27.50	37.50
	Golden Modena.	Deep lemon yellow.....	Med., Int. Pom.	Dec. 5	27.50	37.50
	Yellow Cameo.	Deep lemon yellow.....	Int. Pom.	Dec. 5	90.00	100.00



Pompons, Single and Anemone Varieties (continued)

YELLOW (Continued)

D	Yellow Supreme.	Buff yellow.....	Med., L. Anem.	Dec. 10	27.50	37.50
	Spun Gold.	Deep lemon yellow.....	Med., Int. Dec.	Dec. 15	27.50	37.50
	December Gold.	Deep golden yellow.....	Med., Int. Dec.	Dec. 15	27.50	37.50
	Christmas Cheer.	Buff yellow.....	Med., Int. Pom.	Dec. 15	27.50	37.50
	Yellow Garza.	Lemon yellow.....	Short, Int. Anem.	Dec. 15	27.50	37.50
	Vibrant.	Deep lemon yellow.....	Med., Int. Dec.	Dec. 20	27.50	37.50
	Winterset.	Lemon yellow .....	Med., Int. Pom.	Dec. 25	27.50	37.50
	Yellow Snow.	Deep lemon yellow.....	Med., Int. Pom.	Dec. 30	27.50	37.50
	Ivory Snow.	Ivory yellow.....	Int. Pom.	Dec. 30	70.00	80.00

WHITE

H	Silver Moon.	Cream white.....	Med., Int. Sgl.	Sept. 15	27.50	37.50
H	Normandie.	White suffused with pink.....	Short, Int. Dec.	Sept. 20	27.50	37.50
H	Jean Cumming.	Ivory white.....	Med., Int. Dec.	Sept. 20	27.50	37.50
	Avalanche .....		Int. Dec.	Oct. 5	50.00	60.00
H	Uvalda.	Cream white .....	Med., Int. Pom.	Oct. 10	27.50	37.50
SP	White Jewell .....		Short, S. Pom.	Oct. 15	27.50	37.50
SDH	Silver Ball .....		Med., L. Pom.	Oct. 15	27.50	37.50
SPH	Irene .....		Short, S. Pom.	Oct. 18	27.50	37.50
S	Minong .....		Med., S. Pom.	Oct. 20	27.50	37.50
	Pinocchio, White (see front cover).....		S. Pom.	Oct. 25	90.00	100.00
S	Arcadia .....		Med., Int. Pom.	Oct. 28	27.50	37.50
PD	Graceland.	White with yellow center.....	Med., Int. Anem.	Oct. 28	27.50	37.50
SD	Sea Gull.	Cream white .....	Tall, Int. Pom.	Nov. 1	27.50	37.50
SD	White Doty.	Ivory white.....	Med., L. Pom.	Nov. 1	27.50	37.50
S	Blanche .....		Med., Int. Anem.	Nov. 1	27.50	37.50
	Nancy Crain .....		Med., S. Pom.	Nov. 5	70.00	80.00
D	White Anemone .....		Tall, Int. Anem.	Nov. 5	27.50	37.50
S	Rev. Horace Bushnell.	Cream white.....	Tall, Int. Pom.	Nov. 8	27.50	37.50
SD	Shasta .....		Med., Int. Anem.	Nov. 8	27.50	37.50
S	Crystal Jewell .....		Tall, S. Pom.	Nov. 8	27.50	37.50
	Vesper .....		Int. Pom.	Nov. 10	40.00	50.00
SD	White Mensa.	Ivory white.....	Med., Int. Sgl.	Nov. 10	27.50	37.50
SPD	Little America .....		Med., Int. Anem.	Nov. 10	27.50	37.50
SPD	Richard Mandel .....		L. Pom.	Nov. 10	27.50	37.50
	Chicago Pearl.	Ivory white.....	Med., Int. Pom.	Nov. 15	27.50	37.50
SD	White Freida.	Yellow cushion.....	Med., L. Anem.	Nov. 15	27.50	37.50
PD	White Norma.	White suffused with pink....	Tall, L. Anem.	Nov. 18	27.50	37.50
	Matchless.	White .....	Int. Pom.	Nov. 20	90.00	100.00
D	Long Island Beauty.	White, yellow cushion..	Med., L. Anem.	Nov. 20	27.50	37.50
D	Nevada.	White, green cushion.....	Med., Int. Anem.	Nov. 20	70.00	80.00
	Pearl .....		Tall, Int. Pom.	Nov. 20	27.50	37.50
	Seafoam .....		Med., Int. Pom.	Nov. 20	40.00	50.00
	Priscilla .....		Int. Pom.	Nov. 23	70.00	80.00
PD	White Yuletide .....		Short, Int. Pom.	Nov. 28	27.50	37.50
	Cordova.	Cream white .....	Med., Int. Dec.	Nov. 30	27.50	37.50
	Royal Queen .....		Med., Int. Pom.	Dec. 5	27.50	37.50
	Cameo.	Ivory white .....	Med., Int. Pom.	Dec. 5	27.50	37.50
	Silver Star.	Ivory white.....	Tall, Int. Pom.	Dec. 10	27.50	37.50
	Yukon .....		Tall, Int. Sgl.	Dec. 10	27.50	37.50
D	White Supreme .....		Med., L. Anem.	Dec. 10	27.50	37.50
	December Glory.	Ivory white.....	Med., Int. Dec.	Dec. 15	27.50	37.50
	Garza Supreme .....		Short, Int. Anem.	Dec. 15	27.50	37.50
	Snow.	Ivory white .....	Med., Int. Pom.	Dec. 30	27.50	37.50
	Revelation .....		Med., Int. Pom.	Dec. 30	40.00	50.00

BRONZE AND RED

PH	Early Bronze.	Orange bronze.....	Short, S. Pom.	Sept. 15	27.50	37.50
	Burgundy.	Wine red .....	Med., Int. Dec.	Oct. 5	27.50	37.50
	Ruby Pompon.	Ruby crimson.....	Int. Pom.	Oct. 5	70.00	80.00

## Pompons, Single and Anemone Varieties (continued)

### BRONZE AND RED (Continued)

<b>H</b>	<b>Caliph.</b>	Deep red .....	Med., Int. Dec.	Oct. 8	27.50	37.50
	<b>Red Velvet.</b>	Velvety crimson.....	Int. Dec.	Oct. 8	70.00	80.00
<b>H</b>	<b>Ruth Cumming.</b>	Reddish bronze.....	Med., Int. Dec.	Oct. 8	27.50	37.50
<b>H</b>	<b>Mandarin.</b>	Coral salmon .....	Med., Int. Dec.	Oct. 10	27.50	37.50
<b>H</b>	<b>Aviator.</b>	Coppery red .....	Int. Dec.	Oct. 10	90.00	100.00
	<b>Indian Summer.</b>	Orange bronze.....	Med., Int. Dec.	Oct. 15	27.50	37.50
	<b>Clara Jameson.</b>	Dark reddish bronze.....	Med., S. Pom.	Oct. 15	27.50	37.50
	<b>Roman Bronze</b>	.....	Tall, Int. Pom.	Oct. 20	27.50	37.50
<b>P</b>	<b>Thorina.</b>	Reddish bronze .....	Int. Pom.	Oct. 20	27.50	37.50
<b>S</b>	<b>Adelaide.</b>	Dark reddish bronze.....	Med., S. Pom.	Oct. 23	27.50	37.50
<b>SD</b>	<b>Jemima.</b>	Dark reddish bronze.....	Med., Int. Pom.	Oct. 23	27.50	37.50
<b>H</b>	<b>Natoma.</b>	Flame scarlet .....	Short, Int. Dec.	Oct. 25	27.50	37.50
<b>S</b>	<b>Fire Bird.</b>	Dark reddish bronze.....	Med., Int. Dec.	Oct. 25	27.50	37.50
	<b>October Bronze.</b>	Light bronze.....	Med., Int. Sgl.	Oct. 28	27.50	37.50
	<b>Bronze Daisy.</b>	Light bronze.....	Med., Int. Sgl.	Nov. 1	27.50	37.50
	<b>Elizabeth Peterson.</b>	Light orange bronze.....	Med., Int. Dec.	Nov. 3	27.50	37.50
<b>P</b>	<b>Bronze Buckingham.</b>	Light orange bronze....	Short, Int. Sgl.	Nov. 3	27.50	37.50
<b>S</b>	<b>Robin Hood.</b>	Dark red .....	Med., S. Pom.	Nov. 5	27.50	37.50
	<b>Navaho.</b>	Deep crimson .....	Med., Int. Pom.	Nov. 5	40.00	50.00
<b>S</b>	<b>Red Daisy.</b>	Deep red.....	Med., Int. Sgl.	Nov. 5	27.50	37.50
	<b>Bittersweet.</b>	Bittersweet red .....	Int. Sgl.	Nov. 8	90.00	100.00
	<b>Bronze Bulkeley</b>	.....	Tall, Int. Pom.	Nov. 8	27.50	37.50
	<b>Cassandra.</b>	Orange bronze .....	Med., Int. Pom.	Nov. 10	40.00	50.00
<b>D</b>	<b>Mason's Bronze.</b>	Burnt orange.....	Short, L. Sgl.	Nov. 10	27.50	37.50
	<b>Mason's Red.</b>	Crimson orange.....	L. Sgl.	Nov. 10	27.50	37.50
	<b>Sylvanna.</b>	Orange bronze .....	Med., Int. Sgl.	Nov. 10	70.00	80.00
<b>SD</b>	<b>Europa.</b>	Cardinal red .....	Short, L. Sgl.	Nov. 10	27.50	37.50
<b>SD</b>	<b>Clara Holford.</b>	Deep red .....	Med., L. Sgl.	Nov. 10	27.50	37.50
<b>D</b>	<b>The Titan.</b>	Scarlet crimson.....	Med., L. Anem.	Nov. 10	27.50	37.50
<b>PD</b>	<b>Melba.</b>	Light reddish bronze.....	Short, L. Sgl.	Nov. 10	27.50	37.50
<b>PD</b>	<b>Red Melba.</b>	Light red.....	Short, L. Sgl.	Nov. 10	27.50	37.50
	<b>Trionon.</b>	Crimson bronze.....	Int. Pom.	Nov. 13	70.00	80.00
<b>S</b>	<b>New York.</b>	Reddish bronze.....	Med., S. Pom.	Nov. 13	27.50	37.50
<b>SD</b>	<b>Bronze Masterpiece.</b>	Rosewood bronze.....	Med., Int. Pom.	Nov. 15	27.50	37.50
<b>S</b>	<b>Fez.</b>	Deep reddish bronze.....	Med., S. Pom.	Nov. 15	27.50	37.50
<b>S</b>	<b>Red Princeton.</b>	Brazil red.....	Med., Int. Dec.	Nov. 15	27.50	37.50
	<b>Mrs. Mary Hooker.</b>	Deep red.....	Tall, L. Dec.	Nov. 15	27.50	37.50
	<b>Gold Imperial.</b>	Golden yellow.....	Tall, Int. Dec.	Nov. 15	40.00	50.00
<b>SD</b>	<b>Bronze Freida.</b>	Salmon buff.....	Med., L. Anem.	Nov. 15	27.50	37.50
<b>P</b>	<b>Gypsy.</b>	Light reddish bronze.....	S. Anem.	Nov. 15	27.50	37.50
	<b>Rusticon.</b>	Rust red .....	Int. Pom.	Nov. 20	90.00	100.00
	<b>Catherine.</b>	Light reddish bronze.....	Med., Int. Dec.	Nov. 20	27.50	37.50
	<b>Legal Tender.</b>	Bronze and gold.....	Med., Int. Dec.	Nov. 20	27.50	37.50
<b>PD</b>	<b>Red Rolinda.</b>	Deep reddish bronze.....	Med., Int. Anem.	Nov. 23	27.50	37.50
<b>D</b>	<b>Bronze Goldsmith.</b>	Mars orange.....	Med., Int. Dec.	Nov. 25	70.00	80.00
	<b>Apricon.</b>	Apricot yellow .....	Med., Int. Pom.	Nov. 25	27.50	37.50
	<b>Dorothy Turner.</b>	Deep reddish bronze.....	Med., Int. Pom.	Nov. 25	27.50	37.50
	<b>Yolanda.</b>	Light orange bronze.....	Med., S. Anem.	Nov. 25	27.50	37.50
<b>PD</b>	<b>Crimson Glow.</b>	Crimson maroon.....	Med., Int. Anem.	Nov. 25	27.50	37.50
	<b>Argo.</b>	Orange bronze .....	Short, Int. Pom.	Nov. 28	70.00	80.00
<b>D</b>	<b>Jane.</b>	Light buff bronze.....	Med., L. Sgl.	Nov. 28	27.50	37.50
<b>D</b>	<b>Red Valencia.</b>	Light Brazil red.....	Med., L. Sgl.	Nov. 28	27.50	37.50
<b>D</b>	<b>Apricot Valencia</b>	.....	Med., L. Sgl.	Nov. 28	40.00	50.00
	<b>Glow.</b>	Orange, reddish orange center.....	Med., Int. Pom.	Nov. 30	27.50	37.50
<b>PD</b>	<b>Carnelia.</b>	Bittersweet red .....	Short, L. Sgl.	Nov. 30	27.50	37.50
	<b>Crimson Carnelia.</b>	Deep crimson.....	L. Sgl.	Nov. 30	70.00	80.00
	<b>Royal Crimson.</b>	Dark crimson.....	Med., L. Dec.	Dec. 1	27.50	37.50
	<b>Viking.</b>	Deep reddish bronze.....	Med., Int. Sgl.	Dec. 1	27.50	37.50
	<b>Mahogany Viking.</b>	Mahogany bronze.....	Int. Sgl.	Dec. 1	70.00	80.00
	<b>Chrome Emerald.</b>	Golden orange.....	Short, Int. Anem.	Dec. 1	27.50	37.50
	<b>Wildfire.</b>	Orange rust .....	Med., Int. Dec.	Dec. 3	27.50	37.50

Pompons, Single and Anemone Varieties (continued)

BRONZE AND RED (Continued)

	<b>Cavalcade.</b> Mandarin red .....	Med., Int. Pom.	Dec. 10	27.50	37.50
PD	<b>Bronze Supreme.</b> Light bronze.....	Med., L. Anem.	Dec. 10	27.50	37.50
	<b>Sarong.</b> Crimson scarlet .....	Med., Int. Sgl.	Dec. 15	27.50	37.50

PINK

H	<b>Early Wonder.</b> Lavender .....	Med., Int. Dec.	Sept. 15	27.50	37.50
H	<b>Morning Glow.</b> Mauve pink .....	S. Dec.	Sept. 25	90.00	100.00
H	<b>Jean Treadway.</b> Light rose pink.....	Med., Int. Dec.	Oct. 1	27.50	37.50
H	<b>Mrs. Dupont.</b> Peach pink .....	Med., Int. Dec.	Oct. 5	50.00	60.00
H	<b>Rose Glow.</b> Raspberry .....	Short, S. Dec.	Oct. 5	27.50	37.50
H	<b>Lavender Lady.</b> Lavender .....	Med., Int. Dec.	Oct. 8	50.00	60.00
H	<b>Symphony.</b> Mauve pink and lavender.....	Med., Int. Dec.	Oct. 12	27.50	37.50
S	<b>Jewell.</b> Lavender .....	Med., S. Pom.	Oct. 15	27.50	37.50
P	<b>Dark Pink Jewell.</b> Deep lavender.....	Med., S. Pom.	Oct. 15	27.50	37.50
S	<b>Pink Pearl.</b> Rose pink.....	Med., S. Pom.	Oct. 20	27.50	37.50
S	<b>Capt. Cook.</b> Deep rose pink.....	Tall, Int. Pom.	Oct. 23	27.50	37.50
S	<b>Jessie.</b> (Madeline), Light lavender.....	Med., Int. Pom.	Oct. 25	27.50	37.50
S	<b>Pink Dot.</b> Light pink .....	Med., Int. Pom.	Oct. 25	27.50	37.50
S	<b>October Pink.</b> Light lavender .....	Med., Int. Sgl.	Oct. 28	27.50	37.50
SD	<b>Lillian Doty.</b> Light rose pink.....	Med., L. Pom.	Nov. 1	27.50	37.50
D	<b>Rose Charm.</b> Lavender .....	Med., L. Pom.	Nov. 1	27.50	37.50
P	<b>W. H. Buckingham.</b> Rose pink.....	Short, Int. Sgl.	Nov. 3	27.50	37.50
S	<b>Mrs. Morgan G. Bulkeley.</b> Light rose.....	Tall, Int. Pom.	Nov. 8	27.50	37.50
D	<b>Dark Pink Freida.</b> Deep lavender.....	Med., L. Anem.	Nov. 8	27.50	37.50
	<b>Linda Lou.</b> Lavender yellow cushion.....	Med., Int. Anem.	Nov. 8	27.50	37.50
SPD	<b>Thyra.</b> Lavender .....	Med., L. Pom.	Nov. 10	27.50	37.50
SPD	<b>Queen of Pinks.</b> Lavender.....	L. Pom.	Nov. 10	27.50	37.50
SPD	<b>Ethrelda.</b> Light lavender .....	Int. Anem.	Nov. 12	27.50	37.50
	<b>Dark Pink Bulkeley.</b> Dark rose pink.....	Tall, Int. Pom.	Nov. 15	27.50	37.50
SD	<b>Masterpiece.</b> Tourmaline pink .....	Med., Int. Pom.	Nov. 15	27.50	37.50
P	<b>Orchid Beauty.</b> Orchid, golden cushion.....	Med., Int. Anem.	Nov. 15	27.50	37.50
SPD	<b>Freida.</b> Light lavender, yellow cushion.....	Med., L. Anem.	Nov. 15	27.50	37.50
SD	<b>Norma.</b> Pink petals, salmon cushion.....	Tall, L. Anem.	Nov. 18	27.50	37.50
SD	<b>Dark Pink Norma.</b> Deep lavender.....	Tall, L. Anem.	Nov. 18	27.50	37.50
	<b>Minuet.</b> Mauve to rose pink.....	Med., Int. Pom.	Nov. 25	70.00	80.00
	<b>Usona.</b> Lavender .....	Med., Int. Pom.	Nov. 25	27.50	37.50
	<b>Hasegawa Pink.</b> Lavender .....	Med., Int. Sgl.	Nov. 25	27.50	37.50
PD	<b>Beautiful Lady.</b> Deep lavender.....	Short, L. Anem.	Nov. 25	27.50	37.50
D	<b>Valencia.</b> Orchid pink .....	Tall, L. Sgl.	Nov. 28	27.50	37.50
D	<b>Dark Pink Valencia.</b> Orchid pink.....	Tall, Int. Sgl.	Nov. 28	27.50	37.50
D	<b>Enchantress.</b> Deep pink .....	Med., L. Anem.	Dec. 5	27.50	37.50
	<b>Riviera.</b> Luminous pink .....	Int. Dec.	Dec. 10	40.00	50.00
	<b>Prosperity.</b> Deep lavender .....	Med., Int. Dec.	Dec. 10	27.50	37.50
D	<b>Dark Pink Supreme.</b> Lavender.....	Med., L. Anem.	Dec. 10	27.50	37.50
	<b>Carillon.</b> Deep orchid pink.....	Med., Int. Sgl.	Dec. 15	27.50	37.50
	<b>Pink Treasure Island.</b> Light lavender.....	Med., Int. Dec.	Dec. 20	27.50	37.50
	<b>Rosalind.</b> Rose pink .....	Tall, Int. Sgl.	Dec. 20	27.50	37.50



Pot Plant Varieties

PLEASE NOTE SYMBOLS USED FOR THIS CLASS

The varieties listed below include those of all types which have been found most suitable for pot culture. Types are indicated by Sgl.—Single; Anem.—Anemone; Dec.—Decorative; Pom.—Pompon; Inc.—Incurved. Size of flower is indicated by S—Small; Int. Intermediate; L.—Large; and L.F.—Large Flower commercial. S—Indicates varieties we find most suitable for shading.

NOTE CAREFULLY INSTRUCTIONS FOR ORDERING ON PAGE TWO  
NO ORDERS FOR LESS THAN 50 CUTTINGS OF A VARIETY ACCEPTED  
YOUR TOTAL ORDER MUST BE FOR NOT LESS THAN 250 CUTTINGS

Large Flowering Commercial Varieties

YELLOW

Name and Description	Size & Type	Matures	Price per 1000	
			Unrooted	Rooted
Gold Lode. Light golden yellow.....	Int. Reflexed	Oct. 1	\$27.50	\$37.50
Celestra. Lemon yellow .....	S. Incurved	Oct. 15	27.50	37.50
S Mrs. H. E. Kidder. Deep lemon yellow.....	L. Incurved	Oct. 20	27.50	37.50
S Sunglow. Golden yellow .....	L. Incurved	Oct. 25	27.50	37.50
S Blazing Gold. Deep golden yellow.....	Int. Incurved	Oct. 25	27.50	37.50
S Golden Glory. Golden yellow.....	Int. Semi-Inc.	Nov. 1	27.50	37.50
Cardonia. Deep golden yellow.....	Int. Incurved	Nov. 10	27.50	37.50
S Penrod. Golden yellow.....	Int. Incurved	Nov. 10	27.50	37.50
Honey Dew. Lemon yellow.....	Int. Incurved	Nov. 15	27.50	37.50
S Bonnaffon D Lure. Golden yellow.....	S. Incurved	Nov. 20	27.50	37.50
Friendly Rival. Deep chrome yellow.....	L. Incurved	Nov. 20	27.50	37.50
Sun Gold. Lemon yellow.....	Int. Semi-Inc.	Nov. 25	27.50	37.50

WHITE

Quaker Maid. White, tinged pink.....	Int. Reflexed	Oct. 5	27.50	37.50
S Christina .....	S. Incurved	Oct. 20	27.50	37.50
Ambassador. Cream white .....	L. Incurved	Oct. 23	27.50	37.50
Granite State. (See back cover) .....		Oct. 25	90.00	100.00
S Indianapolis White .....	Int. Incurved	Nov. 8	27.50	37.50
S Marketeer .....	Int. Semi-Inc.	Nov. 18	27.50	37.50
White Frick. White suffused pink.....	Int. Incurved	Nov. 25	27.50	37.50
Smith's Late White. Ivory white.....	Int. Semi-Inc.	Dec. 15	27.50	37.50

BRONZE AND RED

Alameda. Reddish bronze .....	Int. Incurved	Oct. 25	27.50	37.50
S Glitters. Deep reddish orange.....	Int. Reflexed	Oct. 28	27.50	37.50
S Apricot Queen. Orange bronze.....	Int. Incurved	Nov. 1	27.50	37.50
S Indianapolis Bronze. Buff bronze .....	Int. Incurved	Nov. 8	27.50	37.50
Mrs. A. J. Stahelin. Reddish bronze.....	Int. Incurved	Nov. 15	27.50	37.50
Garnet King. Dark red.....	Int. Reflexed	Nov. 18	27.50	37.50
Bronze Frick. Light bronze.....	Int. Incurved	Nov. 25	27.50	37.50
Harvard. Deep red .....	Int. Reflexed	Nov. 30	27.50	37.50

PINK

Early October. Light lavender .....	S. Semi-Inc.	Oct. 10	70.00	80.00
S Justrite. Light rose pink.....	S. Incurved	Oct. 15	27.50	37.50
Major Ed. Bowes. Deep lavender.....	Int. Incurved	Oct. 20	27.50	37.50
Rose Chochard. Light lavender.....	S. Incurved	Oct. 20	27.50	37.50
Rosabella. Rose pink .....	S. Incurved	Oct. 25	27.50	37.50
S J. W. Prince. Rose pink.....	Int. Incurved	Nov. 5	27.50	37.50
S Indianapolis Pink. Deep lavender .....	Int. Incurved	Nov. 8	27.50	37.50
Thanksgiving Pink. Amaranth .....	Int. Reflexed	Nov. 23	27.50	37.50
Peter John. Deep rose pink.....	Int. Reflexed	Nov. 23	27.50	37.50
Helen Frick. Rose pink .....	Int. Incurved	Nov. 25	27.50	37.50

Pot Plant Varieties (continued)

Pompons, Single and Anemone Varieties

YELLOW

Early Yellow.	Light golden yellow.....Sgl. Pom.	Sept. 15	27.50	37.50
Judith Anderson.	Golden yellow.....S. Pom.	Oct. 15	27.50	37.50
S Rodell Improved.	Light lemon yellow.....Int. Pom.	Oct. 20	27.50	37.50
S Cincinnati.	Golden yellow .....L. Pom.	Oct. 20	27.50	37.50
S Golden Herald.	Deep golden yellow.....L. Dec.	Oct. 25	27.50	37.50
S Nuggets.	Light lemon yellow.....S. Pom.	Nov. 5	27.50	37.50
S Yellow Beauty.	Golden yellow.....L. Pom.	Nov. 10	27.50	37.50
S Princeton.	Orange yellow .....Int. Dec.	Nov. 15	27.50	37.50
S Yellow Fellow.	Deep lemon yellow.....Int. Dec.	Nov. 15	27.50	37.50
Sunray.	Light lemon yellow.....Int. Anem.	Nov. 15	27.50	37.50
Yellow Rolinda.	Light buff yellow.....Int. Anem.	Nov. 23	27.50	37.50

WHITE

S White Jewell	.....S. Pom.	Oct. 15	27.50	37.50
S Irene	.....S. Pom.	Oct. 18	27.50	37.50
Graceland.	White with yellow center.....Int. Anem.	Oct. 28	27.50	37.50
S Little America	.....Int. Anem.	Nov. 10	27.50	37.50
S Richard Mandel	.....L. Pom.	Nov. 10	27.50	37.50
White Norma.	White suffused with pink.....L. Anem.	Nov. 18	27.50	37.50
White Yuletide	.....Int. Pom.	Nov. 28	27.50	37.50

BRONZE AND RED

Early Bronze.	Orange bronze .....S. Pom.	Sept. 15	27.50	37.50
Thorina.	Reddish bronze.....Int. Pom.	Oct. 20	27.50	37.50
Bronze Buckingham.	Light orange bronze....Int. Sgl.	Nov. 3	27.50	37.50
Melba.	Light reddish bronze.....L. Sgl.	Nov. 10	27.50	37.50
Red Melba.	Light red.....L. Sgl.	Nov. 10	27.50	37.50
Gypsy.	Light reddish bronze.....S. Anem.	Nov. 15	27.50	37.50
Red Rolinda.	Deep reddish bronze.....Int. Anem.	Nov. 23	27.50	37.50
Crimson Glow.	Crimson maroon.....Int. Anem.	Nov. 25	27.50	37.50
Carnelia.	Bittersweet red .....L. Sgl.	Nov. 30	27.50	37.50
Bronze Supreme.	Dark bronze.....L. Anem.	Dec. 10	27.50	37.50

PINK

Dark Pink Jewell.	Deep lavender.....S. Pom.	Oct. 15	27.50	37.50
W. H. Buckingham.	Rose pink.....Int. Sgl.	Nov. 3	27.50	37.50
S Thyra.	Lavender .....L. Pom.	Nov. 10	27.50	37.50
S Queen of Pinks.	Lavender.....L. Pom.	Nov. 10	27.50	37.50
S Ethelda.	Light lavender .....Int. Anem.	Nov. 12	27.50	37.50
Orchid Beauty.	Orchid, golden cushion.....Int. Anem.	Nov. 15	27.50	37.50
S Freida.	Light lavender, yellow cushion.....L. Anem.	Nov. 15	27.50	37.50
Beautiful Lady.	Deep lavender.....L. Anem.	Nov. 25	27.50	37.50

FLOWERING SCHEDULE

FOR MUMS BOTH SHADED AND NORMAL

We can recommend the following varieties of Mums as responding particularly well to shading. If shading is started in June flowers can be cut from the last of August on through the season.

We give below the date to start shading and the varieties in the various colors that respond best to this treatment.

..... Items marked like this bloom at dates given without shading.

STANDARDS—YELLOW

Variety	Pinching Date	Shading Date	Flowering Date
Blazing Gold .....	May 10	June 19	August 19
Blazing Gold .....	May 17	June 26	August 26
Good News .....	May 14	June 23	August 26
Blazing Gold .....	May 24	July 3	September 2
Good News .....	May 21	June 30	September 2
Penrod .....	May 17	June 26	September 2
Blazing Gold .....	May 31	July 10	September 9
Good News .....	May 28	July 7	September 9
Penrod .....	May 24	July 3	September 9
Blazing Gold .....	June 7	July 17	September 16
Good News .....	June 4	July 14	September 16
Penrod .....	May 31	July 10	September 16
Yellow Mefo .....	May 23	July 2	September 16
Good News .....	June 11	July 21	September 23
Penrod .....	June 7	July 17	September 23
Yellow Mefo .....	May 30	July 9	September 23
Marie Depetris .....	May 26	July 5	September 23
Good News .....	June 18	July 28	September 30
Penrod .....	June 14	July 24	September 30
Yellow Mefo .....	June 6	July 16	September 30
Marie Depetris .....	June 2	July 12	September 30
Good News .....	June 25	Aug. 4	October 7
Penrod .....	June 21	July 31	October 7
Yellow Mefo .....	June 13	July 23	October 7
Marie Depetris .....	June 9	July 19	October 7
Good News .....	July 2	Aug. 11	October 14
Penrod .....	June 28	Aug. 7	October 14
Yellow Mefo .....	June 20	July 30	October 14
Marie Depetris .....	June 16	July 26	October 14
Mrs. Kidder .....	July 12	.....	October 20
Blazing Gold .....	July 12	.....	October 25
Sunglow .....	July 12	.....	October 25
Citronella .....	July 16	.....	October 28
Good News .....	July 16	.....	November 1
Penrod .....	July 19	.....	November 10
Yellow Monument .....	July 22	.....	November 15
Yellow Mefo .....	July 25	.....	November 20
Friendly Rival .....	July 25	.....	November 20
Marie Depetris .....	July 25	.....	November 23
Harvester .....	July 28	.....	November 25
Golden Pearson .....	July 28	.....	November 25
Imp. Golden Chattanooga .....	July 28	.....	November 25
Golden Mrs. Ross .....	July 31	.....	December 3
Meteore .....	Aug. 2	.....	December 10
Imp. Tobin's Late Yellow .....	Aug. 4	.....	December 15



STANDARDS—WHITE

Variety	Pinching Date	Shading Date	Flowering Date
Silver Sheen .....	May 10	June 19	August 19
Silver Sheen .....	May 17	June 26	August 26
Albatross .....	May 14	June 23	August 26
Betsy Ross .....	May 14	June 23	August 26
Silver Sheen .....	May 24	July 3	September 2
Albatross .....	May 21	June 30	September 2
Betsy Ross .....	May 21	June 30	September 2
Indianapolis White .....	May 17	June 26	September 2
Silver Sheen .....	May 31	July 10	September 9
Albatross .....	May 28	July 7	September 9
Betsy Ross .....	May 28	July 7	September 9
Indianapolis White .....	May 24	July 3	September 9
Monument .....	May 20	June 29	September 9
Silver Sheen .....	June 7	July 17	September 16
Albatross .....	June 4	July 14	September 16
Betsy Ross .....	June 4	July 14	September 16
Indianapolis White .....	May 31	July 10	September 16
Monument .....	May 27	July 6	September 16
Mefo .....	May 23	July 2	September 16
Albatross .....	June 11	July 21	September 23
Betsy Ross .....	June 11	July 21	September 23
Indianapolis White .....	June 7	July 17	September 23
Monument .....	June 3	July 13	September 23
Mefo .....	May 30	July 9	September 23
Albatross .....	June 18	July 28	September 30
Indianapolis White .....	June 14	July 24	September 30
Monument .....	June 10	July 20	September 30
Mefo .....	June 6	July 16	September 30
Albatross .....	June 25	Aug. 4	October 7
Indianapolis White .....	June 21	July 31	October 7
Monument .....	June 17	July 27	October 7
Mefo .....	June 13	July 23	October 7
Albatross .....	July 2	Aug. 11	October 14
Indianapolis White .....	June 28	Aug. 7	October 14
Monument .....	June 24	Aug. 3	October 14
Mefo .....	June 20	July 30	October 14
Silver Sheen .....	July 12	.....	October 20
Albatross .....	July 16	.....	November 1
Snow White .....	July 16	.....	November 1
Betsy Ross .....	July 16	.....	November 1
Indianapolis White .....	July 19	.....	November 8
Monument .....	July 22	.....	November 15
Marketeer .....	July 25	.....	November 18
Mefo .....	July 25	.....	November 20
Chattanooga .....	July 28	.....	November 25
December Glory Large .....	July 31	.....	December 1
Margaret Moeller .....	July 31	.....	December 8
White Mistletoe .....	Aug. 2	.....	December 10
Smith's Late White .....	Aug. 4	.....	December 15

BRONZE

Hilda Bergen .....	May 10	June 19	August 19
Hilda Bergen .....	May 17	June 26	August 26
Ivanhoe .....	May 14	June 23	August 26
Detroit News .....	May 14	June 23	August 26
Hilda Bergen .....	May 24	July 3	September 2
Ivanhoe .....	May 21	June 30	September 2
Detroit News .....	May 21	June 30	September 2
Ind. Bronze .....	May 17	June 26	September 2

STANDARDS—BRONZE (Continued)

Variety	Pinching Date		Shading Date		Flowering Date	
Hilda Bergen .....	May	31	July	10	September	9
Ivanhoe .....	May	28	July	7	September	9
Detroit News .....	May	28	July	7	September	9
Ind. Bronze .....	May	24	July	3	September	9
Anaconda .....	May	20	June	29	September	9
Mrs. Roy .....	May	20	June	29	September	9
Hilda Bergen .....	June	7	July	17	September	16
Ivanhoe .....	June	4	July	14	September	16
Detroit News .....	June	4	July	14	September	16
Ind. Bronze .....	May	31	July	10	September	16
Anaconda .....	May	27	July	6	September	16
Mrs. Roy .....	May	27	July	6	September	16
Ivanhoe .....	June	11	July	21	September	23
Detroit News .....	June	11	July	21	September	23
Ind. Bronze .....	June	7	July	17	September	23
Anaconda .....	June	3	July	13	September	23
Mrs. Roy .....	June	3	July	13	September	23
Detroit News .....	June	18	July	28	September	30
Ind. Bronze .....	June	14	July	24	September	30
Anaconda .....	June	10	July	20	September	30
Mrs. Roy .....	June	10	July	20	September	30
Detroit News .....	June	25	Aug.	4	October	7
Ind. Bronze .....	June	21	July	31	October	7
Anaconda .....	June	17	July	27	October	7
Mrs. Roy .....	June	17	July	27	October	7
Detroit News .....	July	2	Aug.	11	October	14
Ind. Bronze .....	June	28	Aug.	7	October	14
Anaconda .....	June	24	Aug.	3	October	14
Mrs. Roy .....	June	24	Aug.	3	October	14
Detroit News .....	July	9	Aug.	18	October	21
Ind. Bronze .....	July	5	Aug.	14	October	21
Anaconda .....	July	1	Aug.	10	October	21
Mrs. Roy .....	July	1	Aug.	10	October	21
Hilda Bergen .....	July	12	.....	.....	October	25
Ivanhoe .....	July	16	.....	.....	November	1
Detroit News .....	July	16	.....	.....	November	1
Ind. Bronze .....	July	19	.....	.....	November	8
Br. Orchid Queen .....	July	19	.....	.....	November	10
Anaconda .....	July	22	.....	.....	November	15
Mrs. Roy .....	July	22	.....	.....	November	15
Gladys Pearson .....	July	28	.....	.....	November	25
Oak Leaf .....	July	28	.....	.....	November	25

PINK

Pink Chief .....	May	13	June	22	August	19
Pink Chief .....	May	20	June	29	August	26
Oct. Rose .....	May	17	June	26	August	26
Major Bowes .....	May	17	June	26	August	26
J. W. Prince .....	May	14	June	23	August	26
Pink Chief .....	May	27	July	14	September	2
Oct. Rose .....	May	24	July	3	September	2
Major Bowes .....	May	24	July	3	September	2
J. W. Prince .....	May	21	June	30	September	2
Ind. Pink .....	May	17	June	26	September	2
Oct. Rose .....	May	31	July	10	September	9
Major Bowes .....	May	31	July	10	September	9
J. W. Prince .....	May	28	July	7	September	9
Ind. Pink .....	May	24	July	3	September	9
Oct. Rose .....	June	7	July	17	September	16
Major Bowes .....	June	7	July	17	September	16

STANDARDS—PINK (Continued)

Variety	Pinching Date	Shading Date	Flowering Date
J. W. Prince .....	June 4	July 14	September 16
Ind. Pink .....	May 31	July 10	September 16
Orchid Queen .....	May 31	July 10	September 16
October Rose .....	June 14	July 24	September 23
J. W. Prince .....	June 11	July 21	September 23
Ind. Pink .....	June 7	July 17	September 23
Orchid Queen .....	June 7	July 17	September 23
Edwin Seidewitz .....	May 26	July 5	September 23
October Rose .....	June 21	July 31	September 30
J. W. Prince .....	June 17	July 27	September 30
Ind. Pink .....	June 14	July 24	September 30
Orchid Queen .....	June 14	July 24	September 30
Edwin Seidewitz .....	June 2	July 12	September 30
October Rose .....	June 28	Aug. 7	October 7
J. W. Prince .....	June 24	Aug. 3	October 7
Ind. Pink .....	June 21	July 31	October 7
Orchid Queen .....	June 21	July 31	October 7
Edwin Seidewitz .....	June 9	July 19	October 7
October Rose .....	July 4	Aug. 14	October 14
J. W. Prince .....	July 1	Aug. 10	October 14
Ind. Pink .....	June 28	Aug. 7	October 14
Orchid Queen .....	June 28	Aug. 7	October 14
Edwin Seidewitz .....	June 16	July 26	October 14
Pink Chief .....	July 8	.....	October 15
Oct. Rose .....	July 12	.....	October 20
Major Bowes .....	July 12	.....	October 20
J. W. Prince .....	July 16	.....	November 1
Ind. Pink .....	July 19	.....	November 8
Orchid Queen .....	July 19	.....	November 10
Thanks. Pink .....	July 25	.....	November 23
Helen Frick .....	July 28	.....	November 25
Edwin Seidewitz .....	July 28	.....	November 25

POMS—SINGLES AND ANEMONES

YELLOW

Yellow Irene .....	May 6	June 15	August 12
Yellow Irene .....	May 13	June 22	August 19
Golden Spray .....	May 10	June 19	August 19
Yellow Dot .....	May 10	June 19	August 19
Yellow Irene .....	May 20	June 29	August 26
Golden Spray .....	May 17	June 26	August 26
Yellow Dot .....	May 17	June 26	August 26
Golden Herald .....	May 14	June 23	August 26
Yellow Daisy .....	May 14	June 23	August 26
Yellow Arcadia .....	May 14	June 23	August 26
Yellow Dot .....	May 24	July 3	September 2
Golden Herald .....	May 21	June 30	September 2
Yellow Daisy .....	May 21	June 30	September 2
Yellow Arcadia .....	May 21	June 30	September 2
Barcarole .....	May 17	June 26	September 2
Nuggets .....	May 17	June 26	September 2
Yellow Bushnell .....	May 17	June 26	September 2
Pixie .....	May 17	June 26	September 2
Yellow Dot .....	May 31	July 10	September 9
Golden Herald .....	May 28	July 7	September 9
Yellow Daisy .....	May 28	July 7	September 9



**POMS—SINGLES AND ANEMONES—YELLOW (Continued)**

Variety	Pinching Date	Shading Date	Flowering Date
Yellow Arcadia .....	May 28	July 3	September 9
Barcarole .....	May 24	July 3	September 9
Nuggets .....	May 24	July 3	September 9
Yellow Bushnell .....	May 24	July 3	September 9
Pixie .....	May 24	July 3	September 9
Yellow Fellow .....	May 20	June 29	September 9
Golden Herald .....	June 4	July 14	September 16
Yellow Daisy .....	June 4	July 14	September 16
Yellow Arcadia .....	June 4	July 14	September 16
Barcarole .....	May 31	July 10	September 16
Nuggets .....	May 31	July 10	September 16
Yellow Bushnell .....	May 31	July 10	September 16
Pixie .....	May 31	July 10	September 16
Yellow Fellow .....	May 27	July 6	September 16
Golden Surprise .....	May 23	July 6	September 16
Princeton .....	May 23	July 2	September 16
Golden Herald .....	June 11	July 21	September 23
Yellow Daisy .....	June 11	July 21	September 23
Yellow Arcadia .....	June 11	July 21	September 23
Barcarole .....	June 7	July 17	September 23
Nuggets .....	June 7	July 17	September 23
Yellow Bushnell .....	June 7	July 17	September 23
Pixie .....	June 7	July 17	September 23
Yellow Fellow .....	June 3	July 13	September 23
Golden Surprise .....	May 30	July 9	September 23
Princeton .....	May 30	July 9	September 23
Barcarole .....	June 14	July 24	September 23
Nuggets .....	June 14	July 24	September 30
Yellow Bushnell .....	June 14	July 24	September 30
Pixie .....	June 14	July 24	September 30
Yellow Fellow .....	June 10	July 20	September 30
Golden Surprise .....	June 6	July 16	September 30
Princeton .....	June 6	July 16	September 30
Goldsmith .....	June 2	July 12	September 30
Lodestar .....	June 2	July 12	September 30
Golden Jane .....	June 2	July 12	September 30
Barcarole .....	June 21	July 31	October 7
Nuggets .....	June 21	July 31	October 7
Yellow Bushnell .....	June 21	July 31	October 7
Pixie .....	June 21	July 31	October 7
Yellow Fellow .....	June 17	July 27	October 7
Golden Surprise .....	June 13	July 23	October 7
Princeton .....	June 13	July 23	October 7
Goldsmith .....	June 9	July 19	October 7
Lodestar .....	June 9	July 19	October 7
Golden Jane .....	June 9	July 19	October 7
Barcarole .....	June 28	Aug. 7	October 14
Nuggets .....	June 28	Aug. 7	October 14
Yellow Bushnell .....	June 28	Aug. 7	October 14
Pixie .....	June 28	Aug. 7	October 14
Yellow Fellow .....	June 24	July 31	October 14
Golden Surprise .....	June 20	July 30	October 14
Princeton .....	June 20	July 30	October 14
Goldsmith .....	June 16	July 26	October 14
Lodestar .....	June 16	July 26	October 14
Golden Jane .....	June 16	July 26	October 14
Yellow Irene .....	July 8	.....	October 15
Rodell Imp. ....	July 8	.....	October 20
Yellow Hammer .....	July 8	.....	October 20
Golden Spray .....	July 12	.....	October 23
Golden Herald .....	July 12	.....	October 25

POMS—SINGLES AND ANEMONES—YELLOW (Continued)

Variety	Pinching Date		Shading Date	Flowering Date	
Yellow Dot .....	July	12	.....	October	25
Yellow Arcadia .....	July	16	.....	October	28
Yellow Sea Gull .....	July	16	.....	November	1
Yellow Daisy .....	July	16	.....	November	1
Mary L. Hall .....	July	16	.....	November	1
Barcarole .....	July	19	.....	November	5
Nuggets .....	July	19	.....	November	5
Yellow Bushnell .....	July	19	.....	November	8
Pixie .....	July	19	.....	November	10
Princeton .....	July	22	.....	November	15
Yellow Fellow .....	July	22	.....	November	15
Susanne Miller .....	July	25	.....	November	18
Golden Surprise .....	July	25	.....	November	18
Golden Emblem .....	July	25	.....	November	23
Goldsmith .....	July	28	.....	November	25
Sunnyside .....	July	28	.....	November	25
Lodestar .....	July	28	.....	November	25
Golden Jane .....	July	28	.....	November	28
Yellow Cordova .....	July	28	.....	November	30
Yellow Cameo .....	July	31	.....	December	5
December Gold .....	Aug.	2	.....	December	15
Yellow Garza .....	Aug.	2	.....	December	15
Vibrant .....	Aug.	4	.....	December	20
Yellow Snow .....	Aug.	10	.....	December	30

WHITE

Irene .....	May	6	June	15	August	12
White Jewell .....	May	6	June	15	August	12
Irene .....	May	13	June	22	August	19
White Jewell .....	May	13	June	22	August	19
Pinocchio .....	May	10	June	19	August	19
Minong .....	May	10	June	19	August	19
Irene .....	May	20	June	29	August	26
White Jewell .....	May	20	June	29	August	26
Pinocchio .....	May	17	June	26	August	26
Minong .....	May	17	June	26	August	26
Arcadia .....	May	14	June	23	August	26
Irene .....	May	27	July	6	September	2
White Jewell .....	May	27	July	6	September	2
Pinocchio .....	May	24	July	3	September	2
Minong .....	May	24	July	3	September	2
Arcadia .....	May	21	June	30	September	2
Sea Gull .....	May	17	June	26	September	2
Rev. Bushnell .....	May	17	June	26	September	2
Irene .....	June	3	July	13	September	9
White Jewell .....	June	3	July	13	September	9
Pinocchio .....	May	31	July	10	September	9
Minong .....	May	31	July	10	September	9
Arcadia .....	May	28	July	7	September	9
Sea Gull .....	May	24	July	3	September	9
Rev. Bushnell .....	May	24	July	3	September	9
Vesper .....	May	20	June	29	September	9
Little America .....	May	20	June	29	September	9
Pinocchio .....	June	7	July	17	September	16
Minong .....	June	7	July	17	September	16
Arcadia .....	June	4	July	14	September	16
Sea Gull .....	May	31	July	10	September	16
Rev. Bushnell .....	May	31	July	10	September	16
Vesper .....	May	27	July	6	September	16
Little America .....	May	27	July	6	September	16

**POMS—SINGLES AND ANEMONES—WHITE (Continued)**

Variety	Pinching Date	Shading Date	Flowering Date
Matchless .....	May 23	July 2	September 16
Priscilla .....	May 23	July 2	September 16
Nevada .....	May 23	July 2	September 16
Pinocchio .....	June 14	July 24	September 23
Arcadia .....	June 11	July 21	September 23
Sea Gull .....	June 7	July 17	September 23
Rev. Bushnell .....	June 7	July 17	September 23
Vesper .....	June 3	July 13	September 23
Little America .....	June 3	July 13	September 23
Matchless .....	May 30	July 9	September 23
Priscilla .....	May 30	July 9	September 23
Nevada .....	May 30	July 9	September 23
Seafoam .....	May 26	July 5	September 23
Pinocchio .....	June 21	July 31	September 30
Arcadia .....	June 18	July 28	September 30
Sea Gull .....	June 14	July 24	September 30
Rev. Bushnell .....	June 14	July 24	September 30
Vesper .....	June 10	July 20	September 30
Little America .....	June 10	July 20	September 30
Matchless .....	June 6	July 16	September 30
Priscilla .....	June 6	July 16	September 30
Nevada .....	June 6	July 16	September 30
Seafoam .....	June 2	July 12	September 30
Pinocchio .....	June 28	Aug. 7	October 7
Arcadia .....	June 25	Aug. 4	October 7
Sea Gull .....	June 21	July 31	October 7
Rev. Bushnell .....	June 21	July 31	October 7
Vesper .....	June 17	July 27	October 7
Little America .....	June 17	July 27	October 7
Matchless .....	June 13	July 23	October 7
Priscilla .....	June 13	July 23	October 7
Nevada .....	June 13	July 23	October 7
Seafoam .....	June 9	July 19	October 7
Pinocchio .....	July 4	Aug. 14	October 14
Arcadia .....	July 2	Aug. 11	October 14
Sea Gull .....	June 28	Aug. 7	October 14
Rev. Bushnell .....	June 28	Aug. 7	October 14
Vesper .....	June 24	Aug. 3	October 14
Little America .....	June 24	Aug. 3	October 14
Matchless .....	June 20	July 30	October 14
Priscilla .....	June 20	July 30	October 14
Nevada .....	June 20	July 30	October 14
Seafoam .....	June 16	July 26	October 14
Silver Ball .....	July 8	.....	October 15
White Jewell .....	July 8	.....	October 15
Irene .....	July 8	.....	October 15
Minong .....	July 12	.....	October 20
Pinocchio .....	July 12	.....	October 25
Arcadia .....	July 16	.....	October 28
Sea Gull .....	July 16	.....	November 1
White Doty .....	July 16	.....	November 1
Rev. Bushnell .....	July 19	.....	November 8
Vesper .....	July 19	.....	November 10
Little America .....	July 19	.....	November 10
Chicago Pearl .....	July 22	.....	November 15
White Freida .....	July 22	.....	November 15
Nevada .....	July 25	.....	November 20
Seafoam .....	July 25	.....	November 20
Matchless .....	July 25	.....	November 20
Priscilla .....	July 25	.....	November 23
Cordova .....	July 28	.....	November 30



POMS—SINGLES AND ANEMONES—WHITE (Continued)

Variety	Pinching Date	Shading Date	Flowering Date
Cameo .....	July 31	.....	December 5
Yukon .....	Aug. 2	.....	December 10
Garza Supreme .....	Aug. 7	.....	December 15
Snow .....	Aug. 7	.....	December 30
Ivory Snow .....	Aug. 7	.....	December 30
Revelation .....	Aug. 10	.....	December 30

BRONZE

Firebird .....	May 10	June 19	August 19
Adelaide .....	May 10	June 19	August 19
Roman Bronze .....	May 10	June 19	August 19
Firebird .....	May 17	June 26	August 26
Adelaide .....	May 17	June 26	August 26
Roman Bronze .....	May 17	June 26	August 26
Red Daisy .....	May 14	June 23	August 26
Firebird .....	May 24	July 3	September 2
Adelaide .....	May 24	July 3	September 2
Roman Bronze .....	May 24	July 3	September 2
Red Daisy .....	May 21	June 30	September 2
Navaho .....	May 17	June 26	September 2
Robin Hood .....	May 17	June 26	September 2
Firebird .....	May 31	July 10	September 9
Adelaide .....	May 31	July 10	September 9
Roman Bronze .....	May 31	July 10	September 9
Red Daisy .....	May 28	July 7	September 9
Navaho .....	May 24	July 3	September 9
Robin Hood .....	May 24	July 3	September 9
Bronze Bulkeley .....	May 24	July 3	September 9
Sylvanna .....	May 20	June 29	September 9
Cassandra .....	May 20	June 29	September 9
Firebird .....	June 7	July 17	September 16
Roman Bronze .....	June 7	July 17	September 16
Red Daisy .....	June 4	July 14	September 16
Navaho .....	May 31	July 10	September 16
Robin Hood .....	May 31	July 10	September 16
Bronze Bulkeley .....	May 31	July 10	September 16
Bronze Masterpiece .....	May 27	July 6	September 16
Sylvanna .....	May 27	July 6	September 16
Cassandra .....	May 27	July 6	September 16
Red Princeton .....	May 23	July 2	September 16
Red Daisy .....	June 11	July 21	September 23
Navaho .....	June 7	July 17	September 23
Robin Hood .....	June 7	July 17	September 23
Bronze Bulkeley .....	June 7	July 17	September 23
Bronze Masterpiece .....	June 3	July 13	September 23
Sylvanna .....	June 3	July 13	September 23
Cassandra .....	June 3	July 13	September 23
Red Princeton .....	May 30	July 9	September 23
Bronze Goldsmith .....	May 26	July 5	September 23
Apricot Valencia .....	May 26	July 5	September 23
Navaho .....	June 14	July 24	September 30
Robin Hood .....	June 14	July 24	September 30
Bronze Bulkeley .....	June 14	July 24	September 30
Bronze Masterpiece .....	June 10	July 20	September 30
Sylvanna .....	June 10	July 20	September 30
Cassandra .....	June 10	July 20	September 30
Red Princeton .....	June 6	July 16	September 30
Bittersweet .....	June 6	July 16	September 30
Bronze Goldsmith .....	June 2	July 12	September 30
Apricot Valencia .....	June 2	July 12	September 30

POMS—SINGLES AND ANEMONES—BRONZE (Continued)

Variety	Pinching Date		Shading Date		Flowering Date	
Navaho .....	June	21	July	31	October	7
Robin Hood .....	June	21	July	31	October	7
Bronze Bulkeley .....	June	21	July	31	October	7
Bronze Masterpiece .....	June	17	July	27	October	7
Sylvanna .....	June	17	July	27	October	7
Cassandra .....	June	17	July	27	October	7
Red Princeton .....	June	13	July	23	October	7
Bittersweet .....	June	13	July	23	October	7
Bronze Goldsmith .....	June	9	July	19	October	7
Apricot Valencia .....	June	9	July	19	October	7
Navaho .....	June	28	Aug.	7	October	14
Robin Hood .....	June	28	Aug.	7	October	14
Bronze Bulkeley .....	June	28	Aug.	7	October	14
Bronze Masterpiece .....	June	24	Aug.	3	October	14
Sylvanna .....	June	24	Aug.	3	October	14
Cassandra .....	June	24	Aug.	3	October	14
Red Princeton .....	June	20	July	30	October	14
Bittersweet .....	June	20	July	30	October	14
Bronze Goldsmith .....	June	16	July	26	October	14
Apricot Valencia .....	June	16	July	26	October	14
Adelaide .....	July	12	.....	.....	October	23
Natoma .....	July	12	.....	.....	October	25
Firebird .....	July	12	.....	.....	October	25
October Bronze .....	July	16	.....	.....	October	28
Robin Hood .....	July	19	.....	.....	November	5
Navaho .....	July	19	.....	.....	November	5
Red Daisy .....	July	19	.....	.....	November	5
Bronze Bulkeley .....	July	19	.....	.....	November	8
Bittersweet .....	July	19	.....	.....	November	8
Sylvanna .....	July	19	.....	.....	November	10
Cassandra .....	July	22	.....	.....	November	10
Trianon .....	July	22	.....	.....	November	13
Bronze Masterpiece .....	July	22	.....	.....	November	15
Red Princeton .....	July	22	.....	.....	November	15
Legal Tender .....	July	25	.....	.....	November	20
Rusticon .....	July	25	.....	.....	November	20
Red Rolinda .....	July	25	.....	.....	November	23
Bronze Goldsmith .....	July	28	.....	.....	November	25
Yolanda .....	July	28	.....	.....	November	25
Argo .....	July	28	.....	.....	November	28
Apricot Valencia .....	July	28	.....	.....	November	28
Carnelia .....	July	28	.....	.....	November	28
Crimson Carnelia .....	July	28	.....	.....	November	28
Viking .....	July	31	.....	.....	December	1
Mahogany Viking .....	July	31	.....	.....	December	1
Cavalcade .....	Aug.	2	.....	.....	December	10
Sarong .....	Aug.	4	.....	.....	December	15

PINK

Pink Pearl .....	May	6	June	15	August	12
Jewell .....	May	6	June	15	August	12
Dark Pink Jewell .....	May	6	June	15	August	12
Pink Pearl .....	May	13	June	22	August	19
Jewell .....	May	13	June	22	August	19
Dark Pink Jewell .....	May	13	June	22	August	19
Captain Cook .....	May	10	June	19	August	19
Pink Dot .....	May	10	June	19	August	19
Jessie .....	May	10	June	19	August	19
Pink Pearl .....	May	20	June	29	August	26
Jewell .....	May	20	June	29	August	26
Dark Pink Jewell .....	May	20	June	29	August	26

**POMS—SINGLES AND ANEMONES—PINK (Continued)**

Variety	Pinching Date		Shading Date		Flowering Date	
Captain Cook .....	May	17	June	26	August	26
Pink Dot .....	May	17	June	26	August	26
Jessie .....	May	17	June	26	August	26
October Pink .....	May	14	June	23	August	26
Pink Pearl .....	May	27	July	6	September	2
Jewell .....	May	27	July	6	September	2
Dark Pink Jewell .....	May	27	July	6	September	2
Captain Cook .....	May	24	July	3	September	2
Pink Dot .....	May	24	July	3	September	2
Jessie .....	May	24	July	3	September	2
October Pink .....	May	21	June	30	September	2
Mrs. Bulkeley .....	May	17	June	26	September	2
Dark Pink Bulkeley .....	May	17	June	26	September	2
Pink Pearl .....	June	3	July	13	September	9
Jewell .....	June	3	July	13	September	9
Dark Pink Jewell .....	June	3	July	13	September	9
Captain Cook .....	May	31	July	10	September	9
Pink Dot .....	May	31	July	10	September	9
Jessie .....	May	31	July	10	September	9
October Pink .....	May	28	July	7	September	9
Mrs. Bulkeley .....	May	24	July	3	September	9
Dark Pink Bulkeley .....	May	24	July	3	September	9
Masterpiece .....	May	20	June	29	September	9
Captain Cook .....	June	7	July	17	September	16
Pink Dot .....	June	7	July	17	September	16
Jessie .....	June	7	July	17	September	16
October Pink .....	June	4	July	14	September	16
Mrs. Bulkeley .....	May	31	July	10	September	16
Dark Pink Bulkeley .....	May	31	July	10	September	16
Masterpiece .....	May	27	July	6	September	16
Captain Cook .....	June	14	July	24	September	23
Pink Dot .....	June	14	July	24	September	23
Jessie .....	June	14	July	24	September	23
October Pink .....	June	11	July	21	September	23
Mrs. Bulkeley .....	June	7	July	17	September	23
Dark Pink Bulkeley .....	June	7	July	17	September	23
Masterpiece .....	June	3	July	13	September	23
Minuet .....	May	26	July	5	September	23
Dark Pink Valencia .....	May	26	July	5	September	23
Valencia .....	May	26	July	5	September	23
Captain Cook .....	June	21	July	31	September	30
Pink Dot .....	June	21	July	31	September	30
Jessie .....	June	21	July	31	September	30
October Pink .....	June	18	July	28	September	30
Mrs. Bulkeley .....	June	14	July	24	September	30
Dark Pink Bulkeley .....	June	14	July	24	September	30
Masterpiece .....	June	10	July	20	September	30
Minuet .....	June	2	July	12	September	30
Dark Pink Valencia .....	June	2	July	12	September	30
Valencia .....	June	2	July	12	September	30
Captain Cook .....	June	28	Aug.	7	October	7
Pink Dot .....	June	28	Aug.	7	October	7
Jessie .....	June	28	Aug.	7	October	7
October Pink .....	June	25	Aug.	4	October	7
Mrs. Bulkeley .....	June	21	July	31	October	7
Dark Pink Bulkeley .....	June	21	July	31	October	7
Masterpiece .....	June	17	July	27	October	7
Minuet .....	June	9	July	19	October	7
Dark Pink Valencia .....	June	9	July	19	October	7
Valencia .....	June	9	July	19	October	7



POMS—SINGLES AND ANEMONES—PINK (Continued)

Variety	Pinching Date		Shading Date		Flowering Date	
Captain Cook .....	July	5	Aug.	14	October	14
Pink Dot .....	July	5	Aug.	14	October	14
Jessie .....	July	5	Aug.	14	October	14
October Pink .....	July	2	Aug.	11	October	14
Mrs. Bulkeley .....	June	28	Aug.	7	October	14
Dark Pink Bulkeley .....	June	28	Aug.	7	October	14
Masterpiece .....	June	24	Aug.	3	October	14
Minuet .....	June	16	July	26	October	14
Dark Pink Valencia .....	June	16	July	26	October	14
Valencia .....	June	16	July	26	October	14
Jewell .....	July	8	.....	.....	October	15
Dark Pink Jewell .....	July	8	.....	.....	October	15
Pink Pearl .....	July	8	.....	.....	October	20
Captain Cook .....	July	12	.....	.....	October	23
Jessie .....	July	12	.....	.....	October	25
Pink Dot .....	July	12	.....	.....	October	25
October Pink .....	July	16	.....	.....	October	28
Lillian Doty .....	July	16	.....	.....	November	1
Mrs. Bulkeley .....	July	19	.....	.....	November	8
Dark Pink Bulkeley .....	July	19	.....	.....	November	8
Thyra .....	July	19	.....	.....	November	10
Masterpiece .....	July	22	.....	.....	November	15
Freida .....	July	22	.....	.....	November	15
Norma .....	July	25	.....	.....	November	18
Minuet .....	July	28	.....	.....	November	25
Beautiful Lady .....	July	28	.....	.....	November	25
Valencia .....	July	28	.....	.....	November	28
Dark Pink Valencia .....	July	28	.....	.....	November	28
Riviera .....	Aug.	2	.....	.....	December	10
Carillon .....	Aug.	7	.....	.....	December	15
Rosalind .....	Aug.	7	.....	.....	December	20

POT PLANTS—YELLOW

Gold Lode .....	July	6	July	6	September	2
Celestra .....	July	6	July	6	September	2
Blazing Gold .....	July	3	July	3	September	2
Mrs. Kidder .....	July	3	July	3	September	2
Golden Glory .....	June	30	June	30	September	2
Yellow Beauty .....	June	26	June	26	September	2
Gold Lode .....	July	13	July	13	September	9
Celestra .....	July	13	July	13	September	9
Blazing Gold .....	July	10	July	10	September	9
Mrs. Kidder .....	July	10	July	10	September	9
Golden Glory .....	July	7	July	7	September	9
Yellow Beauty .....	July	3	July	3	September	9
Blazing Gold .....	July	17	July	17	September	16
Mrs. Kidder .....	July	17	July	17	September	16
Golden Glory .....	July	14	July	14	September	16
Yellow Beauty .....	July	10	July	10	September	16
Cardonia .....	July	10	July	10	September	16
Penrod .....	July	10	July	10	September	16
Yellow Beauty .....	July	17	July	17	September	23
Cardonia .....	July	17	July	17	September	23
Penrod .....	July	17	July	17	September	23
Sunray .....	July	13	July	13	September	23
Bonnaffon DeLuxe .....	July	9	July	9	September	23
Sungold .....	July	5	July	5	September	23
Yellow Beauty .....	July	24	July	24	September	30
Cardonia .....	July	24	July	24	September	30
Penrod .....	July	24	July	24	September	30

POT PLANTS—YELLOW (Continued)

Variety	Pinching Date		Shading Date		Flowering Date
Sunray .....	July	20	July	20	September 30
Bonnaffon DeLuxe .....	July	16	July	16	September 30
Sungold .....	July	12	July	12	September 30
Yellow Beauty .....	July	31	July	31	October 7
Cardonia .....	July	31	July	31	October 7
Penrod .....	July	31	July	31	October 7
Sunray .....	July	27	July	27	October 7
Bonnaffon DeLuxe .....	July	23	July	23	October 7
Sungold .....	July	19	July	19	October 7
Yellow Beauty .....	Aug.	7	Aug.	7	October 14
Cardonia .....	Aug.	7	Aug.	7	October 14
Penrod .....	Aug.	7	Aug.	7	October 14
Sunray .....	Aug.	3	Aug.	3	October 14
Bonnaffon DeLuxe .....	July	30	July	30	October 14
Sungold .....	July	26	July	26	October 14
Gold Lode .....	Aug.	17	.....	.....	October 15
Celestra .....	Aug.	17	.....	.....	October 15
Mrs. Kidder .....	Aug.	21	.....	.....	October 20
Blazing Gold .....	Aug.	21	.....	.....	October 25
Golden Glory .....	Aug.	25	.....	.....	November 1
Yellow Beauty .....	Aug.	31	.....	.....	November 10
Penrod .....	Aug.	31	.....	.....	November 10
Cardonia .....	Aug.	31	.....	.....	November 10
Sunray .....	Aug.	31	.....	.....	November 15
Bonnaffon DeLuxe .....	Sept.	3	.....	.....	November 20
Friendly Rival .....	Sept.	3	.....	.....	November 20
Sungold .....	Sept.	6	.....	.....	November 25
Yellow Cordova .....	Sept.	6	.....	.....	November 30
Imp. Tobin's Yellow .....	Sept.	13	.....	.....	December 15

POT PLANTS—WHITE

Christina .....	July	3	July	3	September 2
Granite State .....	July	3	July	3	September 2
Snow White .....	June	30	June	30	September 2
Richard Mandel .....	June	26	June	26	September 2
Christina .....	July	10	July	10	September 9
Granite State .....	July	10	July	10	September 9
Snow White .....	July	7	July	7	September 9
Richard Mandel .....	July	3	July	3	September 9
Little America .....	June	29	June	29	September 9
Christina .....	July	17	July	17	September 16
Granite State .....	July	17	July	17	September 16
Snow White .....	July	14	July	14	September 16
Richard Mandel .....	July	10	July	10	September 16
Little America .....	July	6	July	6	September 16
Marketeer .....	July	2	July	2	September 16
Granite State .....	July	24	July	24	September 23
Snow White .....	July	21	July	21	September 23
Richard Mandel .....	July	17	July	17	September 23
Little America .....	July	13	July	13	September 23
Marketeer .....	July	9	July	9	September 23
White Frick .....	July	5	July	5	September 23
Granite State .....	July	31	July	31	September 30
Snow White .....	July	28	July	28	September 30
Richard Mandel .....	July	24	July	24	September 30
Little America .....	July	20	July	20	September 30
Marketeer .....	July	16	July	16	September 30
White Frick .....	July	12	July	12	September 30
Granite State .....	Aug.	7	Aug.	7	October 7
Snow White .....	Aug.	4	Aug.	4	October 7

POT PLANTS—WHITE (Continued)

Variety	Pinching Date		Shading Date		Flowering Date	
Richard Mandel .....	July	31	July	31	October	7
Little America .....	July	27	July	27	October	7
Marketeer .....	July	23	July	23	October	7
White Frick .....	July	19	July	19	October	7
Granite State .....	Aug.	14	Aug.	14	October	14
Snow White .....	Aug.	11	Aug.	11	October	14
Richard Mandel .....	Aug.	7	Aug.	7	October	14
Little America .....	Aug.	3	Aug.	3	October	14
Marketeer .....	July	30	July	30	October	14
White Frick .....	July	26	July	26	October	14
White Jewell .....	Aug.	13	.....		October	15
Christina .....	Aug.	17	.....		October	20
Granite State .....	Aug.	21	.....		October	25
Snow White .....	Aug.	25	.....		November	1
Little America .....	Aug.	31	.....		November	10
Richard Mandel .....	Aug.	31	.....		November	10
Marketeer .....	Sept.	3	.....		November	18
White Frick .....	Sept.	6	.....		November	25
White Yuletide .....	Sept.	6	.....		November	28
Cordova .....	Sept.	6	.....		November	30
Margaret Moeller .....	Sept.	11	.....		December	10
Smith's Late White .....	Sept.	13	.....		December	15

POT PLANTS—BRONZE

Alameda .....	June	30	June	30	September	2
Glitters .....	June	30	June	30	September	2
Apricot Queen .....	June	30	June	30	September	2
Ivanhoe .....	June	30	June	30	September	2
Alameda .....	July	7	July	7	September	9
Glitters .....	July	7	July	7	September	9
Apricot Queen .....	July	7	July	7	September	9
Ivanhoe .....	July	7	July	7	September	9
Alameda .....	July	14	July	14	September	16
Glitters .....	July	14	July	14	September	16
Apricot Queen .....	July	14	July	14	September	16
Ivanhoe .....	July	14	July	14	September	16
Gypsy .....	July	6	July	6	September	16
Mrs. Stahelin .....	July	6	July	6	September	16
Apricot Queen .....	July	21	July	21	September	23
Ivanhoe .....	July	21	July	21	September	30
Gypsy .....	July	13	July	13	September	23
Mrs. Stahelin .....	July	13	July	13	September	23
Red Rolinda .....	July	9	July	9	September	23
Bronze Frick .....	July	5	July	5	September	23
Apricot Queen .....	July	28	July	28	September	30
Ivanhoe .....	July	28	July	28	September	30
Gypsy .....	July	20	July	20	September	30
Mrs. Stahelin .....	July	20	July	20	September	30
Red Rolinda .....	July	16	July	16	September	30
Bronze Frick .....	July	12	July	12	September	30
Apricot Queen .....	Aug.	4	Aug.	4	October	7
Ivanhoe .....	Aug.	4	Aug.	4	October	7
Gypsy .....	July	27	July	27	October	7
Mrs. Stahelin .....	July	27	July	27	October	7
Red Rolinda .....	July	23	July	23	October	7
Bronze Frick .....	July	19	July	19	October	7
Apricot Queen .....	Aug.	11	Aug.	11	October	14
Ivanhoe .....	Aug.	11	Aug.	11	October	14
Gypsy .....	Aug.	3	Aug.	3	October	14
Mrs. Stahelin .....	Aug.	3	Aug.	3	October	14
Red Rolinda .....	July	30	July	30	October	14

POT PLANTS—BRONZE (Continued)

Variety	Pinching Date	Shading Date	Flowering Date
Bronze Frick .....	July 26	July 26	October 14
Alameda .....	Aug. 21	.....	October 25
Glitters .....	Aug. 25	.....	October 28
Apricot Queen .....	Aug. 25	.....	November 1
Ivanhoe .....	Aug. 25	.....	November 1
Melba .....	Aug. 28	.....	November 10
Red Melba .....	Aug. 28	.....	November 10
Gypsy .....	Aug. 28	.....	November 15
Bronze Masterpiece .....	Aug. 31	.....	November 15
Mrs. Stahelin .....	Aug. 31	.....	November 15
Red Rolinda .....	Sept. 3	.....	November 20
Bronze Frick .....	Sept. 3	.....	November 25

POT PLANTS—PINK

Early October .....	July 6	July 6	September 2
Justrite .....	July 6	July 6	September 2
Rose Chochard .....	July 3	July 3	September 2
J. W. Prince .....	June 30	June 30	September 2
Early October .....	July 13	July 13	September 9
Justrite .....	July 13	July 13	September 9
Rose Chochard .....	July 10	July 10	September 9
J. W. Prince .....	July 7	July 7	September 9
Queen of Pinks .....	June 29	June 29	September 9
Rose Chochard .....	July 17	July 17	September 16
J. W. Prince .....	July 14	July 14	September 16
Ethrelda .....	July 10	July 10	September 16
Queen of Pinks .....	July 6	July 6	September 16
Thyra .....	July 6	July 6	September 16
J. W. Prince .....	July 21	July 21	September 23
Ethrelda .....	July 17	July 17	September 23
Queen of Pinks .....	July 13	July 13	September 23
Thyra .....	July 13	July 13	September 23
Beautiful Lady .....	July 5	July 5	September 23
Helen Frick .....	July 5	July 5	September 23
J. W. Prince .....	July 28	July 28	September 30
Ethrelda .....	July 24	July 24	September 30
Queen of Pinks .....	July 20	July 20	September 30
Thyra .....	July 20	July 20	September 30
Beautiful Lady .....	July 12	July 12	September 30
Helen Frick .....	July 12	July 12	September 30
J. W. Prince .....	Aug. 4	Aug. 4	October 7
Ethrelda .....	July 31	July 31	October 7
Queen of Pinks .....	July 27	July 27	October 7
Thyra .....	July 27	July 27	October 7
Beautiful Lady .....	July 19	July 19	October 7
Helen Frick .....	July 19	July 19	October 7
J. W. Prince .....	Aug. 11	Aug. 11	October 14
Ethrelda .....	Aug. 7	Aug. 7	October 14
Queen of Pinks .....	Aug. 3	Aug. 3	October 14
Thyra .....	Aug. 3	Aug. 3	October 14
Beautiful Lady .....	July 26	July 26	October 14
Helen Frick .....	July 26	July 26	October 14
Early October .....	Aug. 13	.....	October 10
Justrite .....	Aug. 17	.....	October 15
Rose Chochard .....	Aug. 17	.....	October 20
J. W. Prince .....	Aug. 25	.....	November 1
Thyra .....	Aug. 28	.....	November 10
Queen of Pinks .....	Aug. 28	.....	November 10
Ethrelda .....	Aug. 31	.....	November 12
Masterpiece .....	Aug. 31	.....	November 15
Helen Frick .....	Sept. 6	.....	November 25
Beautiful Lady .....	Sept. 6	.....	November 25
Riviera .....	Sept. 11	.....	December 10



## SOME CULTURAL FUNDAMENTALS

GEO. J. BALL

If a writer knows from experience what he's talking or writing about, some points of practical use can be gotten across with the printed page; but conditions vary greatly, making suggestions somewhat uncertain. For this reason the following Mum remarks will stay pretty close to fundamentals that with the exercise of common sense are applicable most everywhere.

### SOILS

Some of the most successful growth we have had was thru gravel or soilless culture. On the other hand, we have noted top grade show flowers that were grown in the rather stiff yellow material that prevails in New Jersey. This clearly proves what can be done with any type of soil with proper moisture, fertility, and general management. With heavy soil plenty of strawy manure or other organic material is necessary not only for fertility effect, but for aeration as well, and this is of greater importance than is generally appreciated; for while it may not analyze high in fertility, thru its mechanical and aeration effect it seems to act on or unlock the fertility already in the soil. Organic material when combined with plenty of water seems to be nature's manure. When grown in gravel the pumping up and draining back of liquid nutrient sets up perfect aeration and is, we believe, largely responsible for the perfect Mum results we have had with it. The occasional difficulties with soilless culture are frequently due, we believe, to improper strength of the nutrient, usually excessively high concentrations.

Most of our growing has been in old greenhouse soil that has been used for years, and usually we make out very well with it. The tendency with such old material is to overdo the use of stable manure. To apply it annually will tend to over supply nitrogen that, if it gets too strong, burns the roots. It also accumulates disease that in the open is held down by the natural elements—frost and drenching rains. Probably the most costly disease that accumulates in soil is known as *Verticillium*, and this can best be destroyed in the soil thru steaming it; in fact, we believe it profitable to use this treatment for every crop of Mums unless it was used for the preceding crop. When steamed annually we find old greenhouse soil usually produces better results than will fresh soil. This is explained by its accumulated fertility that is wasted when changed annually because of the time required for it to break down and become available. If steaming is not done before planting Mums, at least thoroly saturate it with clear water. This tends to leach away any accumulated salts or other toxic material.

Testing soil for fertility and pH is another precaution that should be used for any greenhouse crop, especially before applying fertilizers. If this was more generally practiced we would meet with fewer of those unexplainable failures or mediocre results that sometimes puzzle us. The tendency with many growers is to over-fertilize. If a soil test points to an excess of any element it should be lowered thru leaching. Thoroly saturating the soil, as is done in the open, is another natural method of balancing soil irregularities. The pH for Mums should be around neutral. If much on the acid side, use lime at the rate of about 5 lbs. to each 100 sq. ft. of bench surface. If on the alkaline side, 1 lb. of agricultural sulphur to every 100 sq. ft. should restore it to around neutral.

### RAISED OR GROUND BEDS

Ground or deep beds are of course more economical than are raised beds or "tables" as our veteran friends refer to them. But—if the sub soil is not naturally well drained thru being gravelly, chances are they will not dry out promptly as they should. This might be particularly so if the greenhouse site is flat or if at all low, in which case the water level during excessive rains might get dangerously close to the surface. It is pretty safe to suggest that if the sub-soil is a clayey one and the greenhouse site is located on

such as our level prairies or inclined to be at all low, which it of course should not be, the cost of two lines of 4 in. drain tile in a 4-5 ft. bed will be a very profitable expenditure. This is so not only for drainage but for steaming the soil; and these tiles have sub-irrigating possibilities, and are of some aeration value. However, promoting the prompt drying out of the soil is their principal value. While 3 in. tile is sometimes suggested and is evidently all right, we prefer 4 in. How deep to lay the tile depends some on depth of good soil in the bed. We use 6 in. siding for ground beds and get the tile down 12 in. below top of siding. We find this arrangement works out very well for steam sterilizing and sub-irrigating of such deep rooting crops as Peas, but we do not use this irrigating plan for Mums because of their shallower rooting habit. Six inch deep raised beds are of course the safest because of their 100% drainage. They are also indispensable for most bedding and pot plant growing but for cut flowers generally, and that includes Mums, the well-drained deep bed is not only less costly to build and maintain, but top results can be had with them if lower soil moisture is watched.

### SPACING DISTANCE

This question is a rather vital one for commercial growers, for it does bear on the net results. We sometimes get the impression that there is a tendency to over space, but this may be due to lack of possible growth or late planting. These factors make it difficult to safely make definite suggestions. However, with big standard Mums planted in June or early July, 8 x 8 in. with 2 flowers per plant is standard commercial practice. With a 4 ft. raised bed this might be closed up some, say 7 x 8. This spacing with one flower to a plant will of course produce some larger flowers, but they will not return as much as will the two smaller flowers per plant with the same spacing. For most retail growers the net will be still higher if at least part of the planting carries 4-5 flowers per plant using the same or 8 x 10 spacing. In England the tendency is almost exclusively toward smaller flowers and more of them. They are largely grown there outdoors during the summer in what appears to be 10 in. pots with from 12-16 flowers per pot. In the Paris market the bigger they are the better they like them, so better make it some of each size. Pompons we like to space 6 x 7 or for strong growers planted early 7 x 8 in., top half way down at a height of 8 in. and carry up about three stems. As already stated, if side growths are trimmed out once from about the base, this plan makes for longer stems because there is no waste of the plant's energy in making brushy blind growth.

### WATERING

This is probably the most important factor in the profitable culture of any crop. There is just one way to determine whether or not water should be supplied and that is to dig down 6 or 8 in. in deep beds and examine the soil. If it is wet enuf to ball up in the hand, chances are it should be let alone. While this comes close to being a hard and fast rule, we must also consider the strength and health of growth. A raised bed in the fall filled with roots and strong heavy growth can hardly be overwatered. On the other hand, with temperatures in the 90's growth is not nearly so active as during cool fall weather and water must be used accordingly. This is true of any cool temperature plant. Cinerarias and Calceolarias sometimes have quite a struggle to keep alive during mid-summer, but brace up wonderfully with cooling weather. While Mums tolerate summer heat better, they too brace up with fall weather. Although these conditions do not call for much difference in watering, the experienced grower knows that it means some adjustment must be made; and every grower knows or should know that stiff, clayey soil is very much more retentive of moisture than a soil filled with organic matter and perhaps some sand. The difference in their water requirements is considerable. We are inclined to believe that, generally speaking, most growers do not use as much water as they should with raised bench crops. We checked on this in a series of experiments with Carnations a few years back. One plot was given a full watering between each regular watering of the house. In other words, this check received 100% more than was considered ample, and

this was begun with planting in July. The result was as interesting as unexpected. Not only did the growth retain its dark color, but the crops came on more rapidly and the average stem length was about 6 in. ahead of the check, with production increase about 1 flower per plant. This check was carried on for 2 seasons with identical results, the variety Charm being used. While we do not believe Mums would tolerate this increase for their nature is different, we do feel that raised bed crops in open or light soil will frequently stand more water than they get.

### SHADING FOR EARLY FLOWERS

Some classes of plants are influenced to form buds and flower by long or short days. Mums are definitely short day plants, by which is meant they can be induced to set buds at any time by artificially shortening daylight hours. This is easily done by enclosing the beds with black cloth that is applied around 5 o'clock in the evening and removed about 7 in the morning. With the sun shining the degree of darkness is not or cannot be made total and it need not be; but it should be fairly close to it, which means that there should be no openings to let light stream in. To support the cloth a framework is built over the beds, the height of which must of course clear the plants when in bud. If the crop is grown outdoors the height should clear the crop in full flower, for the cloth might be of value in protecting against frost. For the top of the bed we have used a good grade of sisalkraft paper. Where a number of adjoining beds are shaded, and there are no upright supports to interfere, the top including the walks should be entirely covered. This makes side covering for each bed unnecessary. Only the outer sides of the entire area need be covered.

We cover the top in 10 ft. sections by attaching the paper or cloth to a round 10 ft. pole that is easily unrolled over the bed. For the sides, better use black sateen cloth that is attached to an upper wire along which it can be pushed back and forth by means of rings attached to cloth and wire.

Planting for shading should be done about a month earlier than for regulation growing to insure stem length, which of course nearly stops with bud setting. We try to get our stock for early July shading planted the 15th to 20th of May. This gets in most October varieties around mid-September. If shading is complete, bud setting will be in evidence in about 3 weeks from start of shading but it should be continued a week or 10 days to insure the setting of plenty of laterals in the case of pompons. Standard buds should be about the size of a dime before shading is discontinued. Should an occasional day be missed in applying shade, or the shade not be as dense as it should be because of old used cloth, setting of buds will be delayed accordingly. On a quiet rainy evening with atmospheric moisture quite high, it might be better not to use the shade. To begin with, light intensity is low on such an occasion; also if plants are enclosed with high humidity conditions, any form of rot or disease that the plants might be susceptible to will be encouraged by it. Should any form of rot set in as a result of shutting off air circulation thru shading, the shading material should be removed after darkness is complete and replaced before daylight.

### SELECTING OR "TAKING" BUDS

In giving dates in Mum catalogs for selecting buds it should be noted that it is based on mid-northern conditions and average timely planting dates. Also, because of more prolonged heat, setting buds in the south is delayed some and should be allowed for. As near as we can estimate, flowering in the south is a week to 10 days later than in the north, the difference not being so great with the quite late varieties. Further, the ever varying seasons in all sections have a bearing on the setting of buds, or the flowering dates. Accordingly, the catalog dates given can only be approximate and are intended for the northern states.

The two classes of buds are known as "crown" and "terminal". The latter is the last or second one and terminates the growth. However, a late planting, or some varieties

may not make a crown bud at all. The terminal or final bud comes usually surrounded by a few smaller ones or in a cluster. The larger center one is "taken" or "left," as you choose to express it, to become the flower. The crown bud might be referred to as a premature one, tho with some varieties it may, with favorable weather, make a good and an earlier flower. However, it does not generally produce the true shade or color of the variety it represents. When crown buds develop early they should generally be pinched out and the strongest break that follows selected to carry on. Except with a few extra early kinds, the next bud to form should be a terminal bud.

### AS POT PLANTS

From early until late fall the florists' pot plant business is quite monopolized by the Mum in all its many types. Considering that practically all their development is made outside the costly overhead of artificial heat, the margin in growing them at prevailing prices is pretty good. There should be little or no losses connected with them for the flowers of unsold plants can be used as cut material.

Today's method of producing pot plants is not only more economical than that of the past, but it makes for greater compactness, a highly desirable point in any pot plant and it is sometimes missing in pot Mums. The general procedure is to plant 4 rooted cuttings or small pot plants in a 6 in. regulation deep pot that is generally preferred for pot Mums to the shallow pot or pan. Just why, I can't say. In our latitude this is usually done the first half of July with the early varieties, and some later will do for the Thanksgiving kinds. If the plants are to be shaded for early flowering, the planting into flowering pots should be done a few weeks earlier. While some planting is done directly with rooted cuttings, the most uniform results are to be had by using nicely started small pot plants. Uniformity in growth is a more important point in a pot plant than in a bench crop. When the cuttings get up 6-8 in. they should be topped back nearly half way down, later disbudded down to about 3 breaks to each plant. These breaks are again topped. Should the planting or potting of early varieties be done early in August, an additional cutting might be used to advantage, for some might not be strong enuf to make more than two good breaks. Furthermore, the late kinds, unless they are to be shaded, will generally have time enuf to get plenty tall from an early August planting. The cuttings available from the earliest topping are sometimes rooted and used for direct planting into 5 or 6 in. pots.

The best results with Mum pot plants are had on raised benches of low well ventilated greenhouses. The best growers use no material on the benches, because the moisture it gives off encourages decay of lower leaves. However, while they will take hold and start more promptly under glass, they can be very well grown in the open or moved into the open after an indoor start. In fact, to grow outdoors thru the hottest part of summer naturally insures a greater degree of compactness than will a hot greenhouse, but with the coming of cooler nights get them under glass to finish. The open air also has some advantage in greater freedom from insects, excepting perhaps the grasshopper. D.D.T. might fix him. When outdoors, watering must be watched more carefully. They do dry out rapidly and the tendency to over or under water might be increased, particularly if they are partly plunged. In fact, we feel safe in saying that under our conditions the outdoor advantages for the pot plant grower are largely offset by the disadvantages. Besides, with the standard price of well grown pot plants at around \$2.00 wholesale, the indoor space can be well afforded.

Another plan is sometimes used that is not nearly so costly and might be equally profitable. We refer to growing the plants in the open ground outdoors until early fall, then potting them individually into 5 or 6's. To make a shapely plant, this plan calls for naturally compact small flowered varieties and more attention to pinching thru the summer. With some protection from sun and air for a few days after potting, they recover surprisingly well, especially during the cool days of fall. The early hardy ones are



sometimes grown in this way and sold either potted or transplanted in full bloom into flower beds that have been destroyed by early frost.

If the heavy root system of well grown plants is confined to a comparatively small pot, feeding them can more easily be overdone than when growing in the open where an excess of fertility can be or is leached away. Applying a small spoon full of Vigoro 2-3 times during the growing season is common practice, but with a lean soil better use a mixture containing more nitrogen. After all, what feed a plant can use depends on its vigor or appearance and what was used in the soil when potting, so it's pretty hard to say anything definite about feeding. In applying any fertility to growing plants, check on it by omitting it with some plants. The results might prove that a lot of fertilizers are sometimes wasted.

Years back small flowered varieties including pompons were principally used for pot plants. Today the buying public largely chooses the big ones, so the same attention must be paid to disbudding such, as when grown for cutting. The class referred to as "disbudded pomps" and the Anemones and singles are also popular for this purpose. While the varieties used cover nearly all on the list that tend to be at all compact, the list of pot plant varieties in this catalog generally covers most popular varieties (see page 17).

---

## *American Grown Bulbs*

We try to exercise the same care in the growing of our American Bulbs as we do in the production of our seeds.

We can furnish high quality of stock in the following:

### LILIES

Croft  
Peerless (Gig.)  
Mexican (Gig.)  
Regale

### DAFFODILS

King Alfred  
Spring Glory  
The First  
Laurens Koster  
Helios, etc.

### IRIS

Wedgewood  
Imperator  
White Excelsior  
Yellow Queen

### CALLAS

White  
Yellow  
Pink

FREESIAS — ANEMONES — RANUNCULI — AMARYLLIS — GLADIOLAS  
FANCY LEAVED CALADIUM — TUBEROUS ROOTED BEGONIAS — GLOXINIAS

# Bulbs from Holland

**Delivery—Fall, 1946**

The ending of the war in Europe found the stocks of Hyacinths, Tulips, Daffodils, etc. in good shape. We delivered many orders this Fall (1945) with good, well grown, well graded and well packed bulbs.

Our growers in Holland advise us that they will be better able to ship your order next Fall (1946), of course stock of some of the most popular varieties may be on the short side, we advise you placing your tentative order, as early as possible, subject to confirmation later when prices are established.

Below is a list of the most popular Holland bulbs in the various colors and types, suitable for Florist use. Order varieties not listed, if you prefer them, if they are grown in Holland and we can secure them for you.

## SPECIALLY PREPARED HYACINTHS

Orders for this stock must reach us before May 1st.

Sizes 19-up 18-19 17-18 14-15

**Bismarck.** Deep porcelain blue.

**Dr. Lieber.** Porcelain blue.

**Gertrude.** Rosy pink.

**L'Innocence.** Pure white.

**Nic. Dames.** Deep Pink, large flower, strong stem.

**Nimrod.** Bright pink.

**Pink Pearl.** Rosy pink, compact spike.



## REGULAR HYACINTHS

Top Size (Exhibition) 19-up

1st Size (Extra Selected) 18-19

2nd Size (Selected Forcing) 17-18

3rd Size (Selected Bedding or Forcing) 15-16

5th Size (Selected Miniature) 14-15

### RED AND PINK

**Gertrude.** Rosy pink, compact spike.

**Lady Derby.** Light pink, large bells, forces easily.

**La Victoire.** Rosy red, large well shaped spike, forces early.

**Marconi.** Bright pink, broad spike, beautiful flower, highly recommended for forcing and bedding, late.

**Nic. Dames.** Deep pink, large flower, very early.

**Pink Pearl.** Rosy pink, compact spike, very early.

**Queen of the Pinks.** Bright rosy pink, large compact spike.

### PURE AND BLUSH WHITE

**L'Innocence.** Pure white, well formed broad spike. Early and excellent for forcing, also recommended for bedding.

**Queen of the Whites.** Pure white, large compact spike.

## REGULAR HYACINTHS

(Continued)

### BLUE AND LILAC

**Bismarck.** Deep porcelain blue, large broad spike, forces early.

**Dr. Lieber.** Porcelain blue, large well formed spike, recommended for early forcing.

**Grand Maitre.** Deep porcelain blue, large spike.

**Lord Balfour.** Purple lilac, forces early.

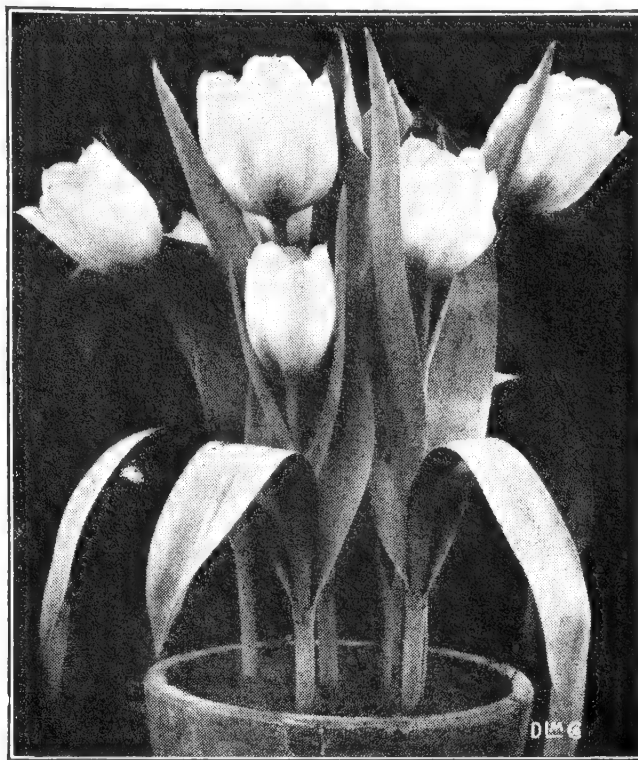
**Perle Brilliant.** Clear porcelain blue.

**Queen of the Blues.** Light blue with silvery appearance, large spike. Excellent for forcing and bedding.

### YELLOW AND ORANGE

**City of Haarlem.** Bright golden yellow, large spike. The finest yellow Hyacinth.

**Yellow Hammer.** Golden yellow, good for forcing.



## TULIPS

Are furnished in two sizes only—12-up and 11-12 CC

### EARLY SINGLE TULIPS

**Brilliant Star.** Scarlet, dark center, fine for early forcing.

**Couleur de Cardinal.** Scarlet, purple shaded, large fine shaped flower with strong stem. A first class forcing and bedding variety.

**General de Wet.** Yellow, flushed with orange, large flower, fine for forcing and bedding. Sport of Prince of Austria.

**Keizerskroon.** Red with broad yellow edge, large flower, fine for bedding and late forcing.

**Madame Gevers.** (Herman Schlegel Maximus), sulphur yellow, large flower. Sport of LaReine Maxima.

**Mon Tresor.** Golden yellow, fine large flower, specially recommended for early forcing.

**Prince of Austria.** Bright orange scarlet, large flower, sweet scented, fine for forcing.

**Sunburst.** Yellow, flushed red.

**Vermilion Brilliant.** Vermilion, large flower, forces early.

**White Hawk.** Pure white, large flower, recommended for forcing and bedding.

### EARLY DOUBLE TULIPS

**Couronne D'or.** Yellow, tinged orange. One of the best double Tulips for forcing in January.

**El Toreador.** Orange red, lighter towards the edge, early.

**Marechal Niel.** Golden yellow, shaded with orange red. Sport of Murillo.

**Mr. Van Der Hoef.** Pure yellow. Sport of Murillo.

**Orange Nassau.** Orange red. Sport of Murillo.

**Peach Blossom.** Deep pink. Sport of Murillo.

**Schoonoord.** Pure white. The finest double white Tulip for forcing.

**Triumph (Triumphator),** deep pink. Improved Peach Blossom.

**Murillo Sports Mixed.** We highly recommend this mixture instead of the ordinary mixture. Murillo Sports flower at the same time and are of the same height.

### DARWIN TULIPS

**Aristocrat.** Satiny pink, light towards the edge, large flower on tall strong stem, new.

**Bartigon.** Cochineal red, strong stem, large flower. One of the best red Darwin Tulips for forcing.

**Campfire.** Dazzling scarlet. Sport of Bartigon.

**Niphetos.** Lemon yellow, new.

**Pride of Zwanenburg.** Salmon pink, lighter towards the edge.

**Princess Elisabeth.** Bright pink, strong stem, highly recommended.

**Rose Copland.** Lilac rose. Sport of Wm. Copland.

**Sunkist.** Golden yellow, large flower of splendid form.

**The Bishop.** Violet blue, large flower, tall stem.

**Utopia.** Bright red, large flower, new.

**William Copland.** Lavender. The well known Darwin Tulip for early forcing.

**William Pitt.** Glowing red, recommended for early forcing.

**Zwanenburg.** Ivory white, tall stem, large flower, fine for forcing.

## Tulips (continued)

### MENDEL TULIPS

- Brightling.** Salmon orange.  
**Early Queen.** Satiny pink, forces Christmas' time.  
**Hildegarde.** Dazzling scarlet, strong stem. One of the earliest Mendel Tulips.  
**Krelage's Triumph.** Deep red, strong stem, forces about New Year's time.  
**Pink Gem.** White with pink edge, large flower, forces about Christmas.  
**Queen Augusta.** Deep apple blossom, forces middle of January.  
**Scarlet Admiral.** Bright red, large flower, good for forcing in February.  
**Scarlet Wonder.** Orange red, forces beginning of January.  
**Sultane.** Rosy Red, good for forcing end of January.  
**Weber.** Opens white changing into pink, large flower, strong stem. Forces end of January.  
**White Sail.** White, forces end of January.  
**Zenith.** Deep rosp pink, large flower, forces beginning of February.

### PARROT TULIPS

- Blue Parrot.** Clear lilac blue. Sport of Bleu Aimable.  
**Red Champion.** Cochineal red. Sport of Bartigon.

### COTTAGE TULIPS

- Advance.** Poppy-red with silvery shade on outside of petals, very large flower.  
**Albino.** Pure white, large flower, strong stem, good for forcing.  
**Carrara.** Pure White, good for forcing.  
**Golden Harvest.** Lemon yellow, large flower, good for forcing.  
**Inglescombe Yellow.** Pure yellow.  
**John Scheepers.** Yellow, very large flower.  
**Mothersday (Lemon Queen),** light yellow, good for forcing.  
**Themis.** Pure White.  
**Wallstreet.** Lemon yellow, good for forcing.

### TRIUMPH TULIPS

- Alberio.** Deep wine red, early forcer.  
**Crater.** Deep carmine red, large flower.  
**Edith Eddy.** Carmine red, lightly edged white, good for forcing the middle of January.  
**Elizabeth Evers.** Fuchsia pink, large flower, forces middle of February.  
**Korniforos.** Crimson red, large flower, strong stem, forces middle of February.  
**Telescopium.** Reddish violet, to the base violet blue, early and easy forcer, large flower of great substance.

### TULIPA SPECIES

- Madame Lefeber.** Vermilion red, enormous flower.

## NARCISSUS

JUMBO—DN No. 1—DN No. 2

### TRUMPET DAFFODILS

- Golden Harvest.** Golden yellow throughout, very large well shaped flower, highly recommended for early forcing.  
**King Alfred.** Clear yellow throughout. The finest yellow Daffodil.  
**Magnificence.** Golden yellow. One of the earliest Daffodils.  
**Mrs. E. H. Krelage.** Perianth white, trumpet creamy white.  
**Pride of Hillegom.** Creamy white perianth. Bright yellow trumpet, good forcer.  
**Rembrandt.** Golden yellow throughout, well formed flower, early forcer.  
**Spring Glory.** Perianth white, trumpet yellow, recommended for early forcing.  
**Wrestler.** Yellow, good for early forcing.

### BARRII NARCISSUS

- Firetail.** Ivory white perianth with orange red cup, tall stem, very substantial flower.  
**Lady Moore.** Perianth white, cup yellow edged orange.  
**Mrs. Barclay.** Ivory white perianth, cup yellow with orange red edge.



### DOUBLE DAFFODILS

- Daphne.** Pure white. The double Poeticus Ornatus.  
**Van Sion.** The well known double golden yellow Daffodil.



## NARCISSUS

(Continued)

### LEEDSII NARCISSUS

**Daisy Schaffer.** Perianth white, creamy cup, greenish tinted at the mouth.

### POETAZ NARCISSUS

**Cheerfulness (double Poetaz Elvira).** White with yellow petals in the center.

**Early Perfection.** Lemon yellow, very free flowering. One of the earliest Poetaz Narcissus for forcing.

**Geranium.** Perianth white, cup orange red.

**La Fiancee.** White perianth, orange cup, very early.

**Laurens Koster.** Pure white with yellow cup, large truss on tall stem.

**L'Innocence.** White perianth, yellow cup, free flowering.

**Winterpride.** White with orange cup, very early.

### IMCOMPARABILIS DAFFODILS

**Carlton.** Clear yellow throughout, large well shaped flower.

**Fortune.** Perianth yellow with deep orange cup, early forcer. The best Incomparabilis in existence.

**Havelock.** Clear yellow throughout, very large well shaped flower.

**Helios.** Perianth sulphur, cup bright orange, free flowering.

**John Evelyn.** Creamy white perianth, orange cup.

**Yellow Poppy.** Sulphur yellow throughout, large flower.

### POETICUS NARCISSUS

**Actaea.** Pure white perianth and scarlet cup, very large flower.

**Ornatus Maximus.** Perianth pure white, cup yellow edged deep red, recommended for early forcing.

## MISCELLANEOUS BULBS AND TUBERS

**Chionodoxa Luciliae (Glory of the Snow),** Sky blue with white eye.

**Eranthis Hyemalis (Winter aconite),** yellow.

**Galanthus Nivalis Simplex.** Single snowdrop.

**Galanthus Nivalis Plena.** Double snowdrop.

**Muscari Armeniacum.** Sky blue.

**Muscari Botryoides Albus.** White.

**Muscari Heavenly Blue.** Sky blue.

**Scilla Campanulata.** Alba Maxima, pure white.

**Scilla Campanulata Excelsior,** blue, large flower.

**Scilla Campanulata Rose Queen.** Pink.

**Scilla Nutans Alba Major,** pure white.

**Scilla Nutans Blush Queen.** Pink.

**Scilla Nutans Major.** Blue. The well known Blue Bell.

**Scilla Sibirica.** Sky blue, 1st size.

## CROCUS

**Baron Brunow.** Bright purple blue.

**King of the Whites.** Snow white, large flower.

**Mont Blanc.** Pure white. The most popular white variety.

**Navy Blue.** Clear blue, large flower.

**Purpurea Grandiflora.** Bright purple. The largest of the purple varieties.

**Remembrance.** Purple blue.

**Snowstorm.** Pure white, large flower.

**Striped Beauty.** Blue white striped.

**Large Yellow.**

**In addition to the foregoing Bulbs we can furnish almost any other variety that is imported from Holland. Send us a list of your needs; we will send you our acknowledgment with prices quoted as soon as these prices are established.**

**A well prepared folder giving cultural instructions for forcing Holland grown bulbs will be mailed with each order, or on request.**

CARNATIONS

DELIVERY—WINTER 1945-1946

Last Winter we sold more cuttings than ever before. This Fall, we have four times as many orders booked for next season as we ever had at this date. Weather, transportation and propagation troubles have caused many serious delays in shipping our orders when wanted. We will endeavor to handle our orders more efficiently this year. Some varieties are already sold out for delivery before March. If you need good clean cuttings get your order to us at once.

Orders will be shipped in rotation, we can not promise delivery exactly when wanted. Shipments will start in November, continue through the early part of December and will be discontinued over the Holidays and then be resumed in January.

Orders for winter delivery should be placed at once. Below is a list of varieties available this season. **Prices quoted, but subject to change.** If other varieties are wanted that are not on this list, it may be possible for us to secure them for you.

WHITE VARIETIES

	Price per	
	100	1000
Arundel—Similar in form to Olivette. Many growers prefer it to Olivette. Better winter bloomers .....	\$12.00	\$100.00
Northland—(Patented). A large fragrant white. It was well liked last year..	20.00	150.00
Col. Blimp—A new white. Introduced by Peter Beuerliens Sons, Westwood, N. J. A gold medal winner.....	25.00	200.00
Casablanca—(Patented). Large, fragrant, stiff stems.....	25.00	200.00
Olivette—One of the better whites. It is noted for steady winter production, symmetrical and spicy flowers, and sturdy medium length stems.....	8.50	75.00
White Peter Fisher—White sport of Peter Fisher, having same characteristics as its parent except for color.....	8.50	75.00
White Maytime—Similar to Pink Maytime from which it sported.....	8.50	75.00
Puritan—Very prolific white on lengthy stems. Flowers are average to large size with moderate splitting. Best grown in a cool house.....	8.50	75.00

LIGHT PINK

Virginia Supreme—A better Virginia.....	15.00	125.00
Hercules Virginia—Giant light pink sport of Virginia, having the growing qualities of its parent.....	15.00	125.00
Blush Fisher—Flesh pink sport of the well known Pink Peter Fisher.....	8.50	75.00
Virginia—Noted for its steady winter production, lack of splitting and its clean stems which require very little disbudding.....	8.50	75.00

DARK PINK

Virginia Miller—The dark Pink Virginia.....	15.00	125.00
Dark Pink Fisher—Similar to Peter Fisher from which it sported. Color is a good dark pink and does not fade in Spring.....	10.00	80.00
John Briy—One of the brightest dark pink Carnations now grown. It is a first quality flower but not a heavy producer. Does best for Spring flowers	8.50	75.00

SALMON PINK

Salmon Virginia. A good salmon sport of Virginia .....	12.00	100.00
Charm—(Patented). A quality salmon-pink. Stems are long and sturdy, the flowers large, and the calyx is strong.....	20.00	150.00
Pollyanna—(Patented). A steady winter producer of average length—sturdy stems. A good keeper .....	15.00	125.00

## Carnations (continued)

### MEDIUM PINK

	Price per	
	100	1000
<b>Dorothy Napier</b> —(Patented). The flowers are large and very full, and the Calyx does not split. Production compares favorably with all varieties of this color and quality .....	20.00	150.00
<b>Giant Fisher</b> —Another sport of <b>Peter Fisher</b> which will be welcomed by admirers of the parent, because it adds size to the other good qualities of the <b>Fisher</b> family .....	10.00	80.00
<b>Peter Fisher</b> —Well known for its profitable productiveness and clear fringed pink flowers .....	8.50	75.00
<b>Pink Treasure</b> —(Patented). A medium or rose pink flower of large size and full appearance .....	20.00	150.00
<b>Rosalie</b> —(Patented). A very excellent Carnation when well grown. The flowers are medium to large, similar in color to the old Ward and good keepers .....	20.00	150.00
<b>Virginia Rose</b> —Well liked whenever Virginia is popular. It is much deeper in color than its parent, but lighter in color than Ward. Very uniform in production and quality, an excellent keeper.....	8.50	75.00

### RED

<b>No. 16 Red</b> —Color the King Cardinal. Quality far superior. Stock very limited .....	20.00	150.00
<b>William Sims</b> —(Patented). .....	20.00	150.00
<b>King Cardinal</b> —(Patented). A consistently good variety with a production record that is as glowing as its flower is appealing.....	12.00	100.00
<b>Tom Knipe</b> —(Patented). The flower is very full and large with serrated petals. The calyx does not split. It propagates easily, produces well and grows well .....	20.00	150.00

### CRIMSON

<b>Seth Parker</b> —(Patented). Rich bright crimson. The flowers are larger than other varieties in this class, stems excellent, splitting unknown. Flowers can be harvested for the Christmas season.....	20.00	150.00
<b>Mrs. C. W. Weld</b> .....	12.00	100.00

### YELLOW

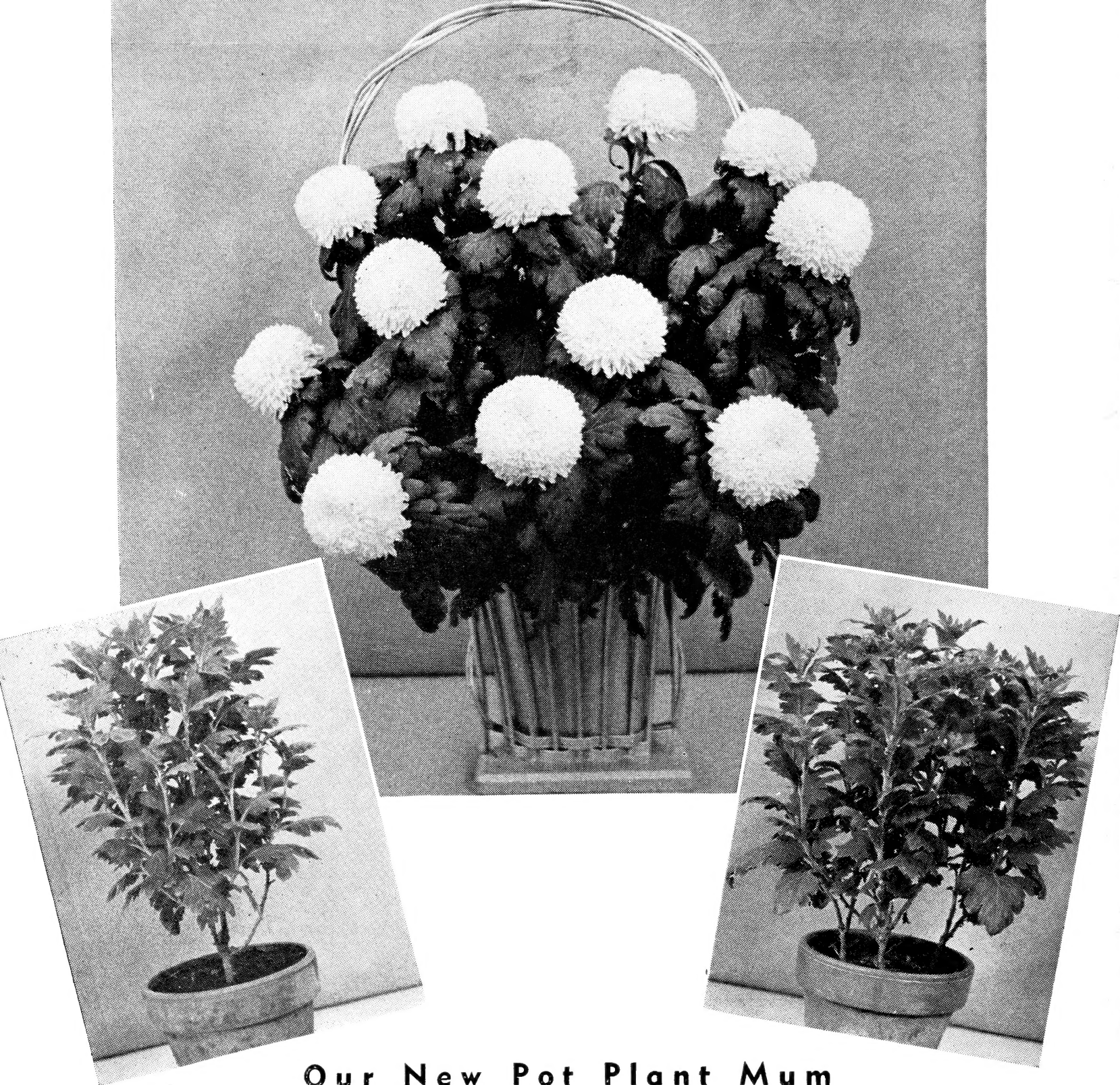
<b>Miller's Yellow</b> —The best yellow.....	12.00	100.00
--	-------	--------

### MISCELLANEOUS

	Price per	
	100	1000
<b>Pelargonium</b> —The color is a mottled effect of crimson-wine on a white base; the blooms are large and the stems average length with strength to carry the flowers gracefully.....	12.00	100.00
<b>Scarlet King</b> —A sport of <b>Pelargonium</b> with more vigor and brighter lighter coloring .....	12.00	100.00
<b>Barbara Brigham</b> —A sport of <b>Golden Wonder</b> having its parent's qualities, but a very pleasing orange-apricot coloring which is penciled with pink....	8.50	75.00
<b>Golden Wonder</b> —One of the best of the yellow variegated varieties; it produces large well filled blooms on medium length stems. Flowers split some but it makes an excellent retail novelty .....	8.50	75.00

**Minimum amount of any one variety is 100 cuttings. Cuttings are shipped by Railway Express collect. None shipped C.O.D. Our responsibility ceases when delivery is made to the Transportation Co. All claims for stock damaged in transit, must be made direct to the Railway Express Agency.**





## Our New Pot Plant Mum "Granite State"

We believe that our new pot plant Mum GRANITE STATE is so near 100% perfect that it will continue to be catalogued for many years. It is as hard to the touch as little "Pinocchio" in front. Note the perfect foliage pushed right up against the snow white, ball shaped flowers. Open flowers shaded: photoed September 22nd. Pot plants of it well in bud. While we own and enjoy the privilege of supplying GRANITE STATE, credit for producing it belongs to W. D. Holley while in charge of Floriculture at the University of New Hampshire.

*Geo. J. Ball*  
I N C.  
WEST CHICAGO  
ILLINOIS

Printed in U.S.A.